

**THIRTY-SIXTH ANNUAL REPORT**

**OF THE**

**BOARD OF TRUSTEES**

**— OF —**

**THE**

**CLEMSON**

**AGRICULTURAL**

**COLLEGE**

**TO THE**

**General Assembly of South Carolina**

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**1925**



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REPORT OF THE PRESIDENT OF THE COLLEGE

## LETTER OF TRANSMITTAL

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To the General Assembly of South Carolina,  
Columbia, S. C.

Gentlemen:

I am herewith transmitting to your hands for the General Assembly the report of the Board of Trustees of the Clemson Agricultural College for the year 1924-25. In doing so I wish to state that the college and its affairs are in excellent business condition.

The teaching at the college is up to the high water mark, and I am much gratified to say that as far as it is humanly possible to do so, every department of the college is moving forward in a proper form.

Yours very truly,

ALAN JOHNSTONE,

President Board of Trustees.

December 1, 1925.

Clemson College, S. C.

DECEMBER 15 1925

CLEMSON UNIVERSITY



## REPORT OF THE PRESIDENT OF THE COLLEGE

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To Hon. Alan Johnstone,

President Clemson College Board of Trustees.

Dear Sir:

Acting President Earle is handing you his report to July 1, 1925. On this date I assumed the duties of Presidency of Clemson College. I wish to report to you that I have found a most gracious faculty and a most courteous student body.

During the semester the students have been responsive to suggestions and have manifested such a fine esprit de corps as to win most favorable comment from the public. Many of the campus problems that arise in every college are being settled by the students themselves.

There have been registered this semester 1,021 students. This number crowds the barracks, but the students have manifested a commendable spirit in adjusting themselves to their crowded condition.

The life of the college is wholesome and stimulating. Both faculty and students are earnest in their work.

Respectfully submitted,

E. W. SIKES,

President,

December 15, 1925



# **REPORT OF ACTING PRESIDENT OF THE COLLEGE**

**Covering the Fiscal Year July 1, 1924—June 30, 1925**

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Clemson College, S. C.

July, 1, 1925.

From S. B. Earle,

Acting President of The Clemson Agricultural College.

To Hon. Alan Johnstone,

President of the Board of Trustees.

Dear Sir:

I have the honor to submit herewith the President's annual report covering the thirty-second session of The Clemson Agricultural College of South Carolina.

The report covers the fiscal year from July 1, 1924 to June 30, 1925, and is intended for your thirty-sixth annual report to the Legislature.

The report is divided into seven main divisions as follows:

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## **CHAPTER I.—THE COLLEGE SESSION—1924-25**

1. A General Statement.
2. A Fiscal Statement.
3. The Collegiate Work.
4. The Student Life and Interests.
5. The Public Service.

## **CHAPTER II.—APPROPRIATIONS FOR 1926**

1. Appropriations for College Work.
2. Appropriations for Public Service.



## CHAPTER I—THE COLLEGE SESSION, 1924-1925

### PART I.—GENERAL STATEMENT

Of the greatest interest to the people of South Carolina was the announcement on December 27th of the election of Dr. E. W. Sikes, to the Presidency of Clemson College. A native of North Carolina, Dr. Sikes has lived in South Carolina for nine years as President of Coker College at Hartsville. He is well known throughout the state as an educator, leader in religious work and deeply interested in all lines of college and state work.

Dr. Sikes was unable to leave Coker College until the close of the session in June, but assumed official control of the affairs of Clemson College on July 1st, 1925.

The unfortunate disturbance at Clemson in October of the past session is too familiar to the people of South Carolina to require a recital at this time. The college weathered the storm, the students settled down to hard work, and we completed a session characterized by accomplishment, and with faculty and students agreed that a new day had begun for Clemson College.

The enrollment during this session was 1155, greater by 93 than for any previous session. Of this total there were 1,082 in the regular four-year courses, or 150 more than for the year before. The remainder were in special and short courses. In addition to this number, 484 attended the 1924 Summer School, bringing the actual total for the year to 1,639.

The graduating class numbered 145 men, of which number 50 were in agriculture, the remainder being scattered through the various other courses.

The health of the students was excellent. We escaped this year the usual epidemic of mumps and measles, and had no serious cases of illness in the hospital.

As has been said often before, the campus of the college is now the state of South Carolina. The Board of Trustees is an able and consecrated body of men. The college has been, is, and I hope will continue to be, an important means in the development of our state in all lines. Our needs are many in order that we may better serve the greater student body, probably after all our highest duty.



**Additions and Improvements:**

During the year under consideration no new building was undertaken, other than the routine repair work on residences and public buildings.

Just before Christmas fire was discovered in the potting room of the greenhouse, and this was destroyed before assistance could be obtained.

On the night of April 1, 1925, the agricultural hall was almost completely destroyed by fire. Only the outside walls are left standing. Practically all equipment was lost and the results of years of work in records, experiments, etc. This was the most beautiful of the college buildings, and its loss is a source of deep regret to all.

The greenhouse has been fully restored, and work is going forward on the rebuilding of the agricultural hall. Some changes were made in the plans for the rebuilding, which will give greater facility in carrying on the work to be housed therein.

**Inventory:**

Our inventory as submitted to the Governor gives the following property values as of date June 30, 1925:

<b>State Classification:</b>	<b>Estimated Present Values</b>
1. Office Equipment -----	\$ 64,742.38
2. Household Equipment -----	55,311.24
4. Library Equipment -----	48,696.79
5. Vehicles -----	12,336.81
6. Live Stock -----	46,964.01
7. Medical and Surgical Equipment -----	1,669.52
8. Military Equipment -----	3,846.70
9. General Plant -----	158,524.01
10. Buildings -----	1,346,958.45
11. Real Estate -----	362,329.00
<b>Equipment Totals -----</b>	<b>\$2,335,163.52</b>
12. Supplies -----	82,748.13
<b>Totals -----</b>	<b>\$2,417,911.65</b>



### **Inspections and Visitations:**

Under the By-Laws of the Board of Trustees there is elected each year a Board of Visitors composed of one prominent citizen from each congressional district. The Board of Visitors for 1925 was made up as follows:

1st District—W. W. Smoak, -----	Colleton
2nd District—R. B. Watson, -----	Ridge Spring
3rd District—R. C. Grier -----	Due West
4th District—W. P. Conyers -----	Greenville
5th District—T. W. Duvall -----	Cheraw
6th District—J. J. Lawton -----	Hartsville
7th District—E. C. Ridgill -----	Batesburg

This Board visited the College on the first Wednesday in May, all members being present except Mr. Grier and Mr. Lawton.

The Committee spent nearly two days in making a comprehensive inspection of the college. Their report is printed in full on pages 91 to 93.

### **The Report of the Board of Health:**

The inspection of the Board of Health was made in November by Dr. A. H. Hayden, Epidemiologist. The conclusions of this officer were very complimentary to the college, especially in regard to conditions existing in the culinary department, which he describes as ideal in all respects.

### **Legislative Visitors:**

For a number of years it has been the policy of the President to invite in small groups to visit the college those members of the General Assembly who have not before come to Clemson in an official capacity. However, this year I thought it wise to give every member of the legislature an opportunity to come to Clemson and see for himself conditions under which our students were living. I therefore appointed four dates during the month of November, and invited the entire legislature of 170 members to come on one of these dates. About seventy members availed themselves of the invitation. Because of the distance from Colum-



bia it is not practical to have the entire body visit the college at one time, and we would not be able to entertain them properly could they make the trip. On the other hand, their visits in smaller groups enable us to care for them properly and in two days to show them over our plant in a very satisfactory manner. I am confident that these visitations have had much to do with the better knowledge of Clemson by the General Assembly, this knowledge being reflected in the legislation affecting the institution.

### **Legislative Acts and Appropriations:**

The college is for 1925-26 asking for very little more than for 1924-25, when our total appropriations for Public Service were \$268,862.85, and for the college work \$88,250.35. The request for public work is the same, and for collegiate work it is \$123,657.36.

Our appropriations for 1924-25 were divided as follows:

For extension service -----	\$110,862.85
For livestock sanitary work -----	73,000.00
For agricultural research -----	50,000.00
For boll weevil work -----	25,000.00
For crop pest commission -----	10,000.00
	<hr/>
	\$ 268,862.85
For collegiate instruction -----	88,250.35
	<hr/>
Total Appropriations -----	\$ 357,113.20

This year there were no bills passed affecting the college. Several of minor importance were introduced, but were withdrawn or failed of passage.

### **Board of Trustees:**

The Board of Trustees held its three regular annual meetings in July, December, and April, and in addition a called meeting was held in October.



## PART II.—A FISCAL STATEMENT

1924-1925

### Fertilizer Tax:

During the fiscal year under consideration the fertilizer tax reached \$217,100.00. This is less than for last year, and for many former years.

### Treasurer's Annual Report:

The Treasurer's annual report, appearing on page 63 of this report, gives full information in regard to the expenditures of **all** funds which pass through the hands of the college treasurer.

The following is a summary of the receipts and expenditures for college purposes only, and those public activities which are required by law to be paid from the fertilizer tax receipts, namely scholarships and the fertilizer inspection and analysis.

### SUMMARIZED STATEMENT

#### Receipts and Expenditures from the Fertilizer Tax and Other Funds Available for Collegiate Work.

DR.

Resources.

#### Income:

1. Interest on Clemson Bequest -----	\$ 3,512.36
2. Interest on Lanscrip -----	5,754.00
3. Morrill & Nelson Funds (U. S.) -----	25,000.00
4. Tuition from Students -----	14,625.00
5. Rents on College Houses -----	13,606.17
6. Interest and Miscellaneous Receipts -----	7,915.56
7. Matriculation and Laboratory Fees -----	5,432.82
8. Privilege Fertilizer Inspection Tax ----	217,100.00

Total ----- \$292,945.91

#### From Other Sources.

9. Reserve Fund from 1924 ----	\$124,079.55
10. State Appropriation -----	84,137.15*— 208,216.70

Total ----- \$501,162.61

\*This item includes \$30,790.75 state appropriation for year 1924, and \$53,346.40 of state appropriation for year 1925.



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Scholarships and advertisements	--\$14,873.35	
Fertilizer Inspection & Analysis	-- 30,616.96	—\$ 45,490.31
College Operating Expenses:		
Salaries	-----	\$181,254.16
Coal, laboratory supplies, etc.	---- 108,527.24	—\$289,781.40
Equipment for teaching	-----	19,397.82
Permanent addit'ns & improv's	-- 30,680.96	— 55,078.78
Total	-----	\$390,350.49

Reserve on hand June 30, 1925, necessary to carry college during season of small fertilizer sales, July 1st to January 1st ----- \$110,812.12\*

Total ----- \$501,162.61

### Report of the Auditor:

The audit of the college books and accounts was made by Mr. L. A. Searson for the State Bank Examiner, and appears as a part of this report (See page 188). The audit shows total receipts from all sources of \$1,771,680.80 and a total disbursement of \$1,560,447.81 with a balance carried forward of \$211,232.99. This balance was distributed as follows—

### To the Credit of—

College fund	-----	\$110,812.12
Cadet fund	-----	5,275.34
Revolving fund	-----	92,671.81
Farm products account	-----	1,805.21
Student banking account	-----	668.51
Total	-----	\$211,232.99

\***Reserve:** It will be noted above that the college entered its fiscal year with apparently \$110,812.12 to its credit. However, during the first six months of the year, July 1st to December 31st, the college received no net revenues from the fertilizer tax. The reserve is necessary to carry the college until the fertilizer season begins early in the following calendar year. Approximately \$200,000.00 is necessary to carry the college during the barren six months period, and the reserve shown plus receipts from sources other than the fertilizer tax just about make up that necessary amount.



The auditor's statement does not include moneys paid in by the Treasurer of the United States for tick eradication, live stock sanitary work and the contribution by the U. S. Agricultural Department for extension service over and above that required of the Smith-Lever Act.

A summary of the funds administered for all activities of the college is as follows—

**Summary of All Funds Administered  
Fiscal Year 1924-25**

**Expenditures:**

1. For college purposes -----	\$ 390,350.19
2. For agricultural public service -----	627,062.97*
3. For revolving accounts -----	164,916.59
4. Cadet funds (board, uniforms, etc.) ---	282,400.84
5. Cadet deposits (personal accounts) ---	95,716.92
6. Funds not recorded with Treasurer ---	110,940.97**

Total ----- . \$1,671,388.78

\*Including hog cholera serum and nursery tag inspection carried on revolving accounts.

\*\*Paid by Treasurer of the U. S. on vouchers approved by college officers.

**PART III.—THE COLLEGIATE WORK**

As stated in a previous chapter, the college work is supported chiefly through the balance which remains on the fertilizer tax after the cost of inspection and analysis has been paid. In 1923 for the first time the legislature made a direct appropriation of \$90,856.66 towards the cost of operation. In 1924 the appropriation was \$91,813.14. In 1925 the appropriation was \$88,250.35.

For the fiscal year 1924-25 the total expenditure for what might be properly classified as **collegiate work** was as follows—



1. For salaries -----	\$181,254.16
2. For labor, insurance, coal, shop and laboratory materials, etc. -----	108,527.24
3. For scholarships -----	14,873.35
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Total for operation -----	\$304,654.75
4. For teaching equipment -----	\$ 24,397.82
5. For minor improvements and additions to plant -----	30,680.96
<hr/>	
Total Collegiate Cost -----	\$359,733.53

This total is very low in operating cost for a technical college, representing approximately \$264.00 per student.

### Enrollment:

The total enrollment for 1924-25 was 1,639 distributed as follows—

(a) In regular college courses -----	1,082
(b) In special courses -----	73
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	1,155
(c) Summer school students 1924 -----	484
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Total -----	1,639

The 1,155 students enrolled in the regular session of the college were distributed as follows—

In agriculture -----	400
In engineering -----	519
In textile industry -----	108
In chemistry and chemistry engineering -----	33
In architecture -----	49
In pre-medical -----	22
In general science -----	24
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Total -----	1,155

### Graduates:

The number of graduates receiving the B. S. degree in June 1925 was 145, distributed as follows—



**Graduates—Class 1925:**

In agriculture -----	50
In mechanical engineering -----	10
In electrical engineering -----	29
In civil engineering -----	16
In textile engineering -----	10
In textile industrial education -----	22
In chemistry -----	1
In architecture -----	6
In general science -----	1
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Total -----	145

I would direct special attention to the large percentage of agricultural graduates at Clemson as compared with other colleges. The average number of agricultural graduates since the foundation of the college is 42 per cent. This year the 50 men graduating in that course represented practically the above average. There was a slight increase in the number of students taking agricultural courses over the number of the past session.

Only in Mississippi, I believe, a state which has practically no industry but agriculture, is the percentage of agricultural graduates higher than at Clemson.

The fact that next to Mississippi we have the largest percentage of the students in the courses of agriculture than any other southern college should be a matter of gratification in a state so largely given over to agriculture as is South Carolina. While not desiring that our other courses maintained at much expense should be barren of students, or that our country boys should be denied full scope for their talents and ambitions, we should always hope that the relative importance of agriculture as the leading industry in our state will be reflected in the number of our students pursuing agricultural courses.



**Short Courses:**

Certificates were awarded to 16 men who had satisfactorily completed the two-year course in agriculture. Five completed the two-year textile course, and one the pre-medical course.

**Certificates of Merit:**

Certificates for distinguished agricultural service were awarded to Mr. Fred H. Young of Timmons ville, and Mr. C. B. Woolsey of Aiken.

**Summer School:**

The 1924 summer school extended from June 8th to July 18th. The enrollment reached 484 as compared with 591 in 1923. The enrollemnt was distributed as follows—

Agricultural teachers -----	313
Students for make-up and entrance -----	72
Federal Board students -----	17
Scholarship boy's club -----	75
Cotton grading -----	7
Total -----	484

**Scholarships:**

In spite of the hard times the scholarships offered by the college were only partly taken up. Seventy-five four-year scholarships were vacant and for these scholarships 150 men stood the examinations. Twenty-six passed the examinations and thirty the fiscal inquiry of the State Board of Public Welfare. Four applicants who were refused scolarships successfully appealed to the State Board of Education.

For the fifty-three two-year agricultural scholarships thirty men applied as compared with sixty-nine the session before, and eight passed as compared with thirty-five the preceding year. Of those who passed the examinations, five appeared as the opening of college to claim the scholarships, as compared with twenty-four the year before.



**The Academic Department—(D. W. Daniel, Director):**

The Academic Department includes the divisions of English, mathematics, physics, history and economics, and sociology. It is more directly related to the public school system of the state than are the purely technical departments.

Director Daniel reports quite an improvement in the work of the Freshman Class particularly, ascribing this improvement in large part to the higher entrance requirements. He also reports a more marked spirit of cooperation, harmony and general good will existing among the members of his faculty, and a closer feeling of friendship between faculty and students.

**The Agricultural Department—Resident Teaching—  
(F. H. H. Calhoun, Director):**

The Agricultural Department embraces agronomy, entomology, zoology, and all other forms of agricultural teaching. We have a strong faculty in this department, and the percentage of students electing this course continues higher than at most other A & M colleges. The number will always fluctuate as in other courses, depending chiefly upon the opportunities ahead of the agricultural graduates. Good salaried positions as county agents, teachers of agriculture in high schools, specialists in extension, and teachers and research workers in colleges and government departments have in recent years stimulated interest in our agricultural courses by giving to the graduates a profitable outlet. If farming were the only outlet for agricultural graduates, we would have a great decline in numbers, because there is yet that irreconcilable conflict between the socialistic view which would have a notion of small farmers, and the business view, so typical of America, that only through large units can brains and energy be properly compensated.

The college cannot control the number of students selecting the various courses, nor direct them in their life work upon leaving college, but it can and ought to guarantee the quality of the work done, and it is because of the quality of this work in our agricultural department that we may well be proud.

With the completion of the rebuilt agricultural building, the work will be greatly improved by reason of additional class room and laboratory facilities.



**The Engineering Department—(S. B. Earle, Director):**

The engineering department has shown its usual efficiency, though handling more men every session. The laboratories of the upper classmen have been improved by the addition of some much needed equipment. The faculty has been enlarged by the addition of a professor of mechanical engineering, and an instructor of drawing. Director Earle reports loyalty and cooperation on the part of the faculty members, and excellent spirit among the students.

**The Military Department—(Lt. Col. O. R. Cole, Commandant):**

The military department has done its work of this session with smoothness. The college again was rated by the War Department as a "Distinguished College." The military discipline is at the basis of efficient operation of the college, contributing to promptness, regularity and economy in time. The Commandant has had during the session seven commissioned officers and three army sergeants. The entire staff has been engaged in teaching the military science of the R. O. T. C. courses, and the commissioned officers have all had a part in the administration of discipline.

Only 38 cadets in the entire corps were not listed in the Reserve Officers Training Corps, and we still maintain the distinction of having more men in the infantry branch of the advanced course than any other college in the nation. Likewise, I doubt if there is another college which has as large a percent of its junior and senior classes voluntarily entering the advanced course. Our enrollment is practically 100 percent every session.

Military discipline enables the work of the college to be carried on in an orderly manner, and is one of the causes of the praise which has been elicited from every inspecting body that has ever been here. I am confident that one of the reasons that has contributed to the success of Clemson graduates has been the fact that for four years they lived under this military system, and by their close association unconsciously learned a great deal of human psychology. Our men have come in competition with men from nearly all of the larger colleges and universities over the country, and have invariably shown up well, many times taking the lead. They are taught loyalty,



courtesy, neatness and self-reliance. They learn to lead and to be led, and many other qualities necessary to the making of a successful man.

**The Textile Department—(C. S. Doggett, Director):**

No department of the college has grown more rapidly during the past few years than has the Textile Department. Beginning with 1918-19 and ending with the past session, the number of sophomores, juniors and seniors in the regular four-year textile course has been as follows—23; 50; 58; 66; 79; 88 and last session 110. In the special and short courses the numbers for the same years are 3; 10; 40; 44; 41; 32 and last session 18. The totals would be 26; 60; 98; 110; 120; 120; and 128. From these figures it will be seen that in seven years the textile department has more than quadrupled its number of students.

While possessing a good equipment, the textile department is not well designed for teaching purposes. It lacks quiet rooms for lectures. As soon as we are able we must make a substantial addition to this department. Next to agriculture, the textile industry is the most important in our state, and we must train its leaders.

We have a two-year course in textile industry, but our degree course in textile engineering is predicated upon the same amount of cultural work as are our courses in civil, electrical and mechanical engineering.

During the session the government has continued its research work with Prof. H. H. Willis and a staff of five experts. This work is under the Bureau of Markets of Washington, and the work as carried on is not only of great service to the cotton industry, but it is a stimulus to our students in textile engineering.

As yet the value of the textile department in furnishing leaders for the cotton mill industry of the state has not been fully appreciated by the cotton manufacturers. If it were, we should have every year from every mill in South Carolina a number of promising young men, who having mastered the practical details of cotton mill work, would be sent here for thorough training in textiles and related lines.



**The Chemistry Department—(R. N. Brackett, Director):**

This department is charged with the teaching of chemistry and the work of fertilizer inspection and analysis, and also conducts the chemical investigations for the S. C. Experiment Station.

This department has an excellent faculty and staff of workers, and is well equipped for its several lines of work. More than any other department, the graduates in chemistry have had the ambition to obtain higher degrees at other institutions, and those who have pursued post-graduate work have without exception given a good account of themselves.

Dr. R. N. Brackett, the director of this department, is completing this year his thirty-fourth year of service. He is the oldest living member of the Clemson faculty now in active duty. His long connection with the institution has been marked with efficiency and unfailing loyalty.

**The Treasurer's Office—S. W. Evans, Secretary-Treasurer):**

(See report, page 63)

No department of the college deserves higher praise than the Treasurer's Office. Its accuracy and high standards of workmanship have been invariably commended by every auditing board and every inspecting body which has come to the college. With three assistants, the Treasurer performs an immense amount of work made necessary by the detailed itemization of the Board's budget of college expenditures. The total funds handled by the Treasurer during the fiscal year 1924-25 amounted to \$1,771,680, these expenditures being represented in not less than twenty-five thousand separate transactions. The report of the Treasurer will be found in the latter part of this report, and is an illuminating document in regard to the many lines of Clemson's expenditures.

**The Registrar's Office—(J. C. Littlejohn, Registrar)**

The Registrar's office has full authority in the matter of admitting students under the rules governing entrance, keeping the records and in general in administering the faculty rules regarding all class matters.



The Registrar is a man of unusual ability for this work and his office operates with great smoothness and efficiency. His methods of admission, matriculation, grade recording and the keeping of records of students and graduates has often been studied by other institutions and favorably commented upon and in some cases adopted.

**The Library—(Miss Marguerite V. Doggett, Librarian):**

With the opening of college in September, 1924, the General Library and the Reference Library were combined under Miss Marguerite V. Doggett as Librarian. With the Librarian and her two assistants, the work is greatly improved, and the material in the library made very accessible to faculty and students. At present our library includes about twenty-five thousand bound volumes, this number including agricultural and government bulletins.

**Public Utilities:**

In addition to the various teaching departments, the college has to maintain the usual public utilities found in a small city, including heat, light and water plants, pumping stations, water and sewerage distribution, telephones, etc. The cost of our public utilities, including the upkeep of buildings and grounds, is approximately \$60,000.00 annually.

The campus, one of the greatest assets of the college, has been further greatly improved by the planting of shrubs and the laying of additional walks and curbing.

The construction and repair division has kept the college buildings and residences in good repair. The total cost for this work amounts to approximately \$12,000.00. The receipts from the rents of residences is approximately \$11,000 annually, nearly enough to pay the total repair bill for both the residences and the public buildings. The present method of upkeep of the sixty or more residences is to paint all buildings on the outside every fifth year and on the inside every seventh year.

In addition to keeping up the repairs on existing buildings, the superintendent of construction and repairs represents the college in new construction given out by contract.



## PART IV.—STUDENT LIFE AND INTERESTS.

### General Statement:

During this session, the student body was the largest in the history of the college. I am glad to note that there is an evidence of more serious-mindedness and earnestness than in some of our recent years.

### The Cost of Education at Clemson:

It has always been the purpose of the Board of Trustees to keep the cost of education at Clemson as low as possible consistent with reasonable contentment and efficiency.

The following is an exhibit of the required charges. The cost of books, which varies from \$25.00 to \$35.00, depending upon the student's class and course, is not included.

#### For Session of Nine Months—1924-25.

The total cost to a student for 1924-25 excluding board, laundry and tuition was \$59.40. For those who pay the tuition \$40.00 must be added.

For your information an itemized list of **all** fees and expenses as well as how paid follows:

#### A. Living Expenses:

a. Board at \$16.00 per month	-----	\$144.00
b. Laundry at \$1.33 1-3 per month	---	12.00
c. Heat, light and water at \$2.10	-----	18.90
	-----	
Total living expenses	-----	\$ 174.90

#### B. Fees:

d. Matriculation fee	-----	\$ 3.00
e. Hospital fee	-----	11.25
f. Laboratory fee	-----	2.25
g. Breakage fee	-----	3.00
h. Incidental fee	-----	9.00
i. Student Activity fee	-----	12.00
	-----	

Total of required fees	-----	\$ 40.50
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C. Total Living Expenses and Required Fees	-----	\$ 215.40
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D. Tuition for those who pay	-----	\$ 40.00
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All payments including board and laundry to the College are made quarterly in advance as follows:

Payable at	High with Tuition	Medium with Free Tuition	Low with Scholarship
Entrance -----	\$68.37	\$58.37	\$33.37
November 8th -----	62.35	52.35	27.35
January 24th -----	62.34	52.34	27.34
March 28th -----	62.34	52.34	27.34
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<b>E. Totals for</b>			
Session -----	\$255.40	\$215.40	\$115.40
Less Board and			
Laundry -----	\$156.00	\$156.00	\$156.00
<hr/>			
<b>F. Total excluding</b>			
Board and			
Laundry -----	\$ 99.40	\$ 59.40	\$ *

\*A Scholarship Student would have \$40.60 left over.

In arriving at the "Medium" cost the tuition, \$10.00 a quarter is deducted from each payment under "High". A scholarship student receives \$100.00 in cash and the \$40.00 tuition; hence in determining the "Low" cost, \$25.00 (one-fourth of \$100.00 plus \$40.00) is deducted each time.

In determining the total **necessary cost**, the question is whether we should attempt to include clothing, books, and supplies. Clemson acts as a purchasing agent in the purchase of uniforms for the students and each cadet therefore pays to the College Treasurer the cost of this clothing. At colleges where the uniforms are handled by local dealers or where the students do not wear uniforms this item would not appear. The cost of books and supplies is a variable quantity depending upon the class and course of the student. For example, a technical book is much more costly than an academic text book.

The Federal Government aids each student in the Reserve Officers Training Corps—R. O. T. C. Nearly every student is a member of this organization and receives the benefits therefrom. The present scale of allowance during the four years is:



**a. To help pay for uniforms.**

Freshman -----	\$30.00
Sophomores -----	6.00
Juniors -----	30.00
Seniors -----	6.00

---

\$72.00

**b. Commutation for Subsistence (Approximate)**

Juniors -----	\$94.50
Seniors -----	80.00

---

\$174.50

Total aid from R. O. T. C. which a student  
may receive during his four years in college \$246.50

The student is also given free transportation and all expenses for one summer training camp. During the six weeks in camp he receives in addition the pay of a soldier.

It will be seen that a scholarship student who belongs to the R. O. T. C. receives his education for a comparatively small sum of money from his own pocket or that of his parent.

During the four years in College it is possible for a scholarship student to receive—

From scholarship -----	\$560.00	(Includes tuition)
From R. O. T. C. -----	246.50	
Total -----	\$806.50	

The State of South Carolina and the Federal Government have made it possible to bring the advantages of a technical college training within reach of every boy who really wants such training.

**The Cadet Mess:**

Clemson has one of the best kitchens and messhalls to be found anywhere in the country. After the fire of 1921 the



plant was rebuilt of sufficient size to meet any reasonable future demands. The messhall and kitchen have tiled floors, are screened, well lighted, heated, and ventilated, and in every way prepared to give the best service for the money paid by the students.

The State Board of Health, which made an inspection in the fall of 1924, complimented this detail of the college organization in the highest terms. Commenting on the messhall Dr. Hayden, the State Epidemiologist, says—

“It was noted that this messhall had been given a coat or more of white paint very recently and that an entirely new lighting system has been installed, making for this hall quite an addition to its usual attractiveness. As during every past year in which I have inspected Clemson College, the report on this hall is necessarily short and all that can be said about it is that it seems to receive the utmost care and attention; contains everything needed or desirable, except possibly it may in the near future have to be enlarged, and indicates every thought for the care, comfort and convenience of the health of the student body.”

“**Kitchen, Pantry and Commissary**, as has been noticed for two years past, are in a ‘spick and span’ condition and in every way attractive.”

“**Meat Room.** In this room was noted the most minute care and inspection of everything served from therein.”

“On the whole, it may be said that the culinary department in connection with Clemson College is so efficiently managed apparently that it is easily recognized as one of the most sanitary, cleanly and attractive institutions of the kind that could possibly be found anywhere in the country. Expressed in as few words as possible, it is ideal.”

### **Barracks Accomodation:**

Our increase in attendance has brought about additional problems in the matter of room accomodations. In a great many rooms we are compelled to house three students where we should have only two. Not only do three beds crowd the rooms, but such an arrangement is not good from the standpoint either of health or of study.



A new dormitory is imperatively needed to properly house our present student body and provide for the increased demand which confronts us every year.

### **The Cadet Hospital:**

The health of the student body during the session has been unusually good. There were no deaths and no cases of serious illness. The number of students on sick report was less than one half of the number during the preceding session.

Our hospital, built about thirty years ago, while meeting our needs, is by no means a credit to the college or to the state, and as soon as possible should be replaced with a modern and up-to-date structure which would cost approximately \$75,000.00.

### **Discipline:**

Taking the session as a whole, the discipline of the corps was excellent. The demerit record was unusually good, a large percentage of the students receiving no demerits at all. Out of the total enrollment of over a thousand, only two cadets exceeded the limit of demerits and were required to withdraw. One violated his hazing pledge and was required to withdraw.

Upon trial by the Discipline Committee, two cadets were suspended during the session. Considering the large number of students in the corps, this is an excellent record. It is likewise interesting to note that the Discipline Committee was called upon only twice during the session to try cadets for serious breaches.

Regarding military discipline, this is one of the most important features of the college. Not only does it insure promptness obedience and courtesy, but it insures as well a time in every day for class work and study. At all times a student is present or accounted for, and it is the policy of the college not to allow student activities or leaves of absence to interfere either with class work or study hour. From 4:30-7:30 p. m. is given the students for their use in the development of their special interests, but the remainder of the day is claimed by the college for class work and study.



### Religious Influences:

Perhaps in no college in the state is a greater effort made to foster the religious and spiritual side of student life.

In the first place, the college contributes to the salary of the four resident ministers and to the Y. M. C. A. Secretary in order that the highest grade men may be available for the preaching and pastoral work among the students. Every cadet is required to attend church on Sunday mornings and a fifteen minute devotional service in chapel every week morning except Saturday. The chapel service consists of Bible reading, the singing of a hymn and an invocation, concluding with the Lord's prayer in which the students join. Clemson has its own hymn book, and perhaps no student body in the state knows or sings so well as many hymns as does the corps of cadets of this institution. The ministers of the various churches have free access to barracks and do pastoral work with the students in their rooms as well as in the churches. Out of a student body of 1,111 men at the time the census was taken 90 percent were church members.

Under the auspices of the Y. M. C. A. 25 Bible classes are conducted in barracks every Sunday, and these classes have an enrollment of about 300 students. These classes are largely led by students themselves. Likewise, twelve morning watch groups engage in prayer service in barracks every morning with an attendance of 125 students. The Y. M. C. A. conducts vesper services every Sunday evening at which local ministers or visiting preachers or laymen speak. There is also a friendship council whose aim is to render all possible help, moral and otherwise, to students in need of help or advice. Student delegations are sent to all religious gatherings where the college should be represented, and a substantial delegation of students attends the Blue Ridge Conference school every summer.

In addition to these activities, the Y. M. C. A. conducts special services and meetings in order to interest students in religious callings.

The Y. M. C. A. building made possible through the generosity of Mr. John D. Rockefeller, is probably the most com-



plete building of its kind in the south. Its present value is not less than \$150,000. It is the social and religious center of the community as well as of the college.

Naturally also, a great many members of the faculty are interested in contributing to the religious life of the students. A large number of the Sunday School teachers come from the faculty, as do some of the Bible class leaders. It should be remembered too that our present curriculum contains as an optional subject the study of the English Bible.

As an indirect influence for good, there might be mentioned the very wise requirement of the Trustees that every faculty member shall attend the morning chapel service. This provides daily at Clemson the rather unique spectacle of having on the rostrum practically the entire corps of teachers.

### **Recreation and Student Affairs:**

Clemson College is one of the first to set up the control of intercollegiate athletics as a part of the regular college organization. At the December, 1921 meeting of the Board of Trustees, By-laws were adopted by which athletics was organized as a regular division of the college in the Department of Student Affairs. The Athletic Director or Coach is a full professor and member of the faculty, the only difference in his status being that he is not paid from college funds, but from the student activity fee and the receipts of athletic contests. These receipts, however, are handled through the Treasurer's office and disbursed just as are other college funds.

The student activities, including athletics, publications, dances, etc., are under the control of the Director of Student Affairs, a college officer of full professorial rank who gives his entire time to the administration of these matters and also to the administration of the expenditure of the cadet funds received for subsistence and other living expenses. This is a most desirable arrangement and is coming to be followed by other institutions which realize the need of close official supervision of what constitutes the most dynamic part of the college life.



## PART V.—THE PUBLIC SERVICE

Clemson College is a great public service corporation of which the collegiate work is only a part.

The non-collegiate public service work of the college may be classified under the following heads—

1. Agricultural research.
2. Agricultural extension service.
3. Agricultural regulatory work.

The total budget for these lines of public service is shown in the following table. This represents the entire investment by way of state appropriation in the development of South Carolina's greatest business, the business of agriculture.

### Expenditures for Non-Collegiate Public Service Fiscal Year 1924-1925

No.	ACTIVITY	Appro'ns State (a)	Appro'ns U. S. (b)	Funds U. S. D. A. (c)	Sales, Etc Counties (d)	Total (e)
1.	Agricultural Research .....	\$ 48,738.55	\$ 30,000.00	\$ .....	\$ 39,646.83	\$118,385.38
2.	Boll Weevil Research .....	23,043.19	.....	25,000.00	.....	48,043.19
3.	Extension Service .....	110,862.85	156,014.49	30,260.00	118,082.13	415,219.47
4.	Live Stock San. Work.....	68,539.49	.....	55,740.97	.....	124,280.46
5.	Hog Cholera Serum.....	.....	.....	.....	19,319.92	19,319.92
6.	Crop Pest and Diseases.....	10,759.63	.....	.....	.....	10,759.63
7.	Fertilizer Insp. and Anal. ....	.....	.....	.....	30,616.96	30,616.96
TOTALS .....		\$261,943.71	\$186,014.49	\$111,000.97	\$207,665.84	\$766,625.01

Note:—Appropriations for calendar year 1925: (a) \$50,000.00; (b) \$110,862.85; (c) \$73,000.00; (d) \$10,000.00, Sale of Farm Products; (f) \$118,082.13 counties and Misc. sources; (g) \$116,917.38 for Home Demonstration Work by Winthrop College; (h) \$25,000.00 for Boll Weevil research.



**1.—Agricultural and Boll Weevil Research—****(H. W. Barre, Director):**

(See report, page 111)

Agricultural research is at the basis of agricultural teaching and agricultural extension. Although it lacks the popular appeal of extension or of regulatory service which reach directly the farms of the people, yet without agricultural research there would be little to extend through the extension service and little known of how to combat plant and animal diseases and insect pests.

The appropriation for all lines of agricultural research work, including boll weevil research, are shown in the foregoing table.

The Agricultural Research work includes:—

1. The parent experiment station at the college, including the college farm and the college laboratories in the agricultural department.

2. The branch stations located at Florence and at Summerville.

3. The cooperative agricultural research carried on with individual farmers in different parts of the state.

4. Boll Weevil control research, which is in cooperation with the United States Department of Agriculture and is on at Florence, at Clemson, and in cooperation with farmers throughout the state.

A full report of research activities is contained in the admirable report of the Director of Research (page 111). Probably the most important research work from an economic standpoint consists in the fertilizer experiments and soil fertility studies which for many years have been carried on under ideal conditions at the Florence Station and in cooperation with farmers at nine different places in the state. The discoveries made here as to the best kind and amount of fertilizers to be used probably saves the farmers of South Carolina every year on their twenty to thirty-million-dollar bill for fertilizers more than the cost of operating this station for a decade. Research along lines of agricultural problems of state-wide importance is a very profitable investment even when only a little is accomplished. For instance it is estimated that the discovery by our research workers of a meth-



od of controlling boll rot of cotton is adding a half million dollars to the wealth of the state each year. The work of the station in developing wilt resistant varieties of cotton, notably the Dixie-Triumph, is probably worth to the state every year the cost of research for many years.

Probably the most important research work carried on is the boll weevil research work at the Florence Station. This work has been developed and supplemented by work at the Clemson and Coast Stations, and on farms in a dozen counties. Already important conclusions have been reached. The bitter controversy as to the best method of poisoning the weevil has been settled and our agricultural leaders and scientists now agree on simple and effective methods of poisoning this destructive pest. This is not only saving to our people the thousands of dollars formerly expended for worthless poison but makes possible a material increase in per acre yield through effective weevil control. Our agronomic and physiological studies are developing practices for producing cotton under boll weevil conditions which indicate that much larger yields can be produced the average season with minimum applications of poison.

The indications are that probably even more important results await further investigations. The difference in temperature and rainfall makes it possible to draw final conclusions from two years' work. In order that the results may be authoritative, they must cover a number of years under the usual variations of soil and climate. In the end there is no question but that science will evolve still more effective means of controlling the boll weevil and enable cotton to be produced profitably.

During the spring of 1925 the National Congress passed the Purnell Bill, which had been before the body for several years. Under the terms of this Bill our Experiment Station will have available for the year 1926 \$20,000 additional from the Federal Government, and each July 1st thereafter an additional \$10,000 until the maximum of \$60,000 per year is reached. Since the bill was passed after the adjournment of the Legislature, Governor McLeod drew up the necessary papers making it possible for us to receive the money available on July 1, 1925. At the next meeting of the General Assembly we will



have to present a resolution asking that the money for our Experiment Station be authorized. Prof. Barre is planning the new work to be done under the administration of this fund.

## **2. Extension Service—(W. W. Long, Director:)**

(See report, page 94)

The total funds disbursed for extension service are shown in the preceding tabulation to be \$415,219.47. Of this amount \$30,260.00 was disbursed by the Treasurer of the United States and \$118,082.13 by County Treasurers. In both cases the vouchers were approved by our Director of Extension. Of the total amount expended for extension service, Winthrop College acting as our agent, expended \$116,917.38 for Home Demonstration Work for women. Needless to say this work was done with that thoroughness characteristic of every task which Winthrop undertakes.

The Smith-Lever Act was accepted by the legislature in 1914. The required state appropriation under this act increased annually from 1914 until a maximum of \$110,862.85 for the fiscal year July 1, 1922 was reached. At this annual figure it will continue. Under the Smith-Lever act the Federal government was to put up an amount equal to the state's contribution plus \$10,000. Due however, to additional appropriations made during the war period and continued since, the Smith-Lever act is now yielding per fiscal year \$156,014.49. In addition the U. S. Department of Agriculture makes a contribution to the extension work of \$30,200.00.

The extension service is becoming more and more a vital part of the state's agricultural life. In every agricultural emergency and for every kind of agricultural service, the people turn to the college as their first and authoritative source of help and information. In all statewide movements for agricultural improvements, and especially during the past year in the organization of state wide marketing associations, the extension service has rendered unique and valuable service.

Mr. Long's report covering the extension service for the year begins on page 94 of this report. Its reading must convince any one of the value of the extension service, never



greater than at times of depression or demoralization among our farmers. So thoroughly is the extension service entrenched in the confidence of the people that our greatest difficulty today is in meeting the many demands made upon the agents and upon the specialists.

The greatest task in the extension service will always be the selection of satisfactory men for the positions of county agents. The value of a good agent cannot be estimated in money, and any salary is too great for an agent who is a misfit. Only through a course of years and by careful selection based solely upon merit will each county be supplied with just the type of man needed. It is the policy of the extension force to donate \$1,500 to the salary of each county agent. The total salary which the agent receives depends upon the additional fund from the county. In county agents as in everything else, the higher salaries attract the best men.

### **3. Regulatory Service:**

Clemson College is the agent of the legislature in carrying on practically all of the public service which has an agricultural background, and including those lines of regulation which are not always popular but which are necessary in the protection as well as the development of an agricultural industry. Because the college is a non-political and scientific organization, it is better prepared to do the agricultural regulatory work than any other agency in the state. The county and home demonstration agents representing the extension service and located in every county of the state, constitute the eyes and ears for the regulatory officers in combating live stock and plant diseases and insect pests.

Most colleges dislike regulatory service because of its police features. Clemson College, however, has felt that the benefits to agriculture were sufficient to justify the legislature in making the college its agency, even in lines of work which must of necessity make some enemies of the institution.

The regulatory service of the college includes the following lines:

- (a) Fertilizer inspection and analysis.
- (b) Control of crop pests and diseases.
- (c) Live stock sanitary work.



**(a) Fertilizer inspection and analysis—(R. N. Bracket, Chief Chemist, H. M. Stackhouse, Secretary):**

(See report, page<sup>154</sup><sub>s</sub> 157)

Under the laws of the state the Board of Trustees is charged with the inspection and analysis of commercial fertilizers sold within the state. A committee of the Board of Trustees known as the "Board of Fertilizer Control" gives special oversight to the enforcement of the fertilizer laws. Mr. R. I. Manning of Columbia, is the Chairman of this committee.

The work of inspection is under the immediate charge of Mr. H. M. Stackhouse, Secretary of the Board, and the cost is paid from the fertilizer tag tax. The analysis is done by skilled and experienced chemists in the chemistry department under the supervision of the Chief Chemist, Dr. R. N. Brackett. Full reports from both of these offices are to be found with this report.

Mr. Stackhouse's report of the 1924-25 sales shows 838,450 tons of fertilizer and 28,628 tons of cotton seed meal. The total tonnage was 867,078 tons as compared with 881,369 tons in 1923-24. The total number of samples analyzed was 1,360 as compared with 1,450 in 1923-24.

**(b) Crop Pests and Diseases—(H. W. Barre, State Pathologist; Franklin Sherman, State Entomologist):**

(See report, page 169)

The Crop Pest Commission having supervision of the work is constituted under the laws of the state to safe-guard the agricultural interests against the importation of diseased seed, nursery stock and the introduction and spread of insect pests and plant diseases. It is the plant board of health for South Carolina. The Agricultural Committee of the Board constitutes the Crop Pest Commission, and Mr. J. E. Wannamaker of St. Matthews is the Chairman.

Nothing today stands between the farmers and ruin except the scientific men who are doing research work to discover methods to combat plant diseases and insect ravages. The State Entomologist and the State Pathologist and their



assistants keep up the defenses against invasion and devise new methods to fight new enemies which break through and enter the state. Anyone unfamiliar with the work of the Crop Pest Commission will be interested and astonished to read of its many activities in the full report which is appended hereto. Probably no investment of \$10,000.00 by the state brings larger returns than the appropriation which supports the work.

In summing up the work of this commission for the past year, it is interesting to note the scope of the work in the state. A total of 400 inspections of trees and plants was made within the state, these inspections including nursery, sweet potato, cabbage and tomato. This gives some idea of the enormous volume of work involved. The people throughout the state generally realize to a greater degree that the efforts of the commission are helpful and are intended to promote the welfare of the farmer.

The commission has been called upon more during the year covered by this report than in previous years. This is due to the increased interest in nursery work in the state, and to the home growing of plants within the state. A total of more than 144,000 tags were issued to cover shipments of trees, plants, etc., within the state alone.

**(c) Live Stock Sanitary Work—(W. K. Lewis, State Veterinarian):**

(See report, page 182)

The live stock sanitary work includes tick eradication, tuberculosis eradication, hog cholera control, the investigation and control of contagious outbreaks, and quarantine activities against the introduction of diseased live stock.

This work is supported by an annual appropriation of \$73,000.00. The headquarters for the work is in the Liberty National Bank Building, Columbia, S. C. Here the state veterinarian has his office, and the assistant state veterinarians not stationed at strategical points in the state, work out from Columbia. Here, too, a laboratory is maintained for the purpose of making tests in order to confirm the diagnoses made by the field veterinarians. In this laboratory



is carried on important research work relating to the parasites which are to be combatted in South Carolina.

The force that carries on this work consists of the state veterinarian, jointly employed and paid by the college and the U. S. Department of Agriculture, ten veterinarians stationed at different points in the state, twenty-five private veterinarians who act as deputy veterinarians on a per diem basis when their services are needed, and a number of veterinarians and inspectors having supervision in the tick eradication work.

The scope of work may be visualized by the following data—

Number of investigations conducted -----	3,767
Miles traveled in answering calls for service -----	91,892

The magnitude of the tubercular work will be appreciated when it is stated that 1,969 herds were tested during the year for tuberculosis. In these herds were 17,997 dairy cattle, of which number 109 were found to be tubercular and were killed. Since November 1, 1917, 88,600 cattle have been tested and 1,162 found to be tubercular. Since the transmissibility of tuberculosis from the dairy cow to the human is no longer doubted, this work is of great importance from a public health standpoint.

The treatment of hogs for cholera is another one of the large activities carried on by this office. There has been a very marked decrease in the number of outbreaks during the past year as compared with previous years.

The total value of the serum and virus and other biologics which were distributed on a cost basis amounted during the year under consideration to \$22,128.62.

The sale of hog cholera serum is handled on a revolving basis, no appropriation being required for the purchase of the serum, this being sold to farmers at cost. The treatment of the hogs and the control of outbreaks of cholera are handled by assistant state veterinarians and their deputies and assistants, the double treatment being now advocated. Thru this preventive measure the outbreaks of hog cholera and their severity have been greatly lessened.



The following is quoted from the State Veterinarian's report in regard to tick eradication work—

"This class of work has been completed except in the counties of Hampton, Jasper, Beaufort, Colleton, Dorchester, Charleston, Berkeley, Williamsburg, Georgetown, and Horry, in which systematic work is being conducted and splendid results are being obtained. We anticipate the freeing of the greater portions of the quarantined areas with this season's work. The long prevailing custom, however, of cattle owners turning their live stock at large during the fall and winter months is a very serious handicap to the work for the reason that tick infested animals are apt to roam over large areas and reinfest territory previously freed of ticks. This condition makes it necessary to rework certain areas each year until we are absolutely sure that complete eradication has been accomplished."

The expenditures for this work were as follows—

From Federal funds -----	\$55,740.97
From State funds -----	\$69,370.25

## CHAPTER II.—APPROPRIATIONS FOR 1926.

### PART 1.—APPROPRIATIONS FOR COLLEGE WORK.

For nearly a third of a century Clemson College has been operated on fertilizer tax. In 1915-16 when this source of revenue greatly declined, a loan of \$62,400.00 was made. This loan was repaid during the following three years. During the period of 1918-20 the costs of college operation greatly increased, and following the year of maximum receipts, 1920, the fertilizer tax again fell off to such an extent that it was necessary for the legislature to supplement the college resources either by a loan or by an appropriation. In 1921 a loan of \$112,842.11 was granted, and again in 1922, \$150,000.00. When it became obvious that the college would require every year a supplementary income, the legislature in 1923 wisely abandoned the method of having the State Treasurer lend the college money and made direct appropriation instead.



The following table will be of interest as showing the growth of the fertilizer tax on the one hand and the college attendance on the other. The necessity for the loans and for the appropriations which have been made is easily apparent when this table is studied. As a matter of fact, appropriations would have been much sooner necessary, but for the fact that during the first five years of the period shown the college was paying for a good deal of state work of a non-collegiate character out of the fertilizer tax receipts. In 1914 the state began to make appropriations for these non-collegiate activities, and that relief put off the day of asking for direct appropriations. However, the increased attendance and the increased cost of operation will make necessary from this time on a substantial annual appropriation to meet the operating costs of the college and provide for its growth.

### Enrollment 1909-10 to 1924-25

Fiscal Statement \* July 1, 1909—June 30, 1926

Fiscal Year	Fertilizer Tax **	State Appropriation or Loan	College Session	Summer Session	Total	Grads
1909-10	\$226,980.96	None .....	650	3	653	77
10-11	264,374.08	None .....	683	20	703	87
11-12	221,000.00	None .....	804	7	811	92
12-13	231,500.00	None .....	819	15	834	74
13-14	276,000.00	None .....	800	18	818	78
14-15	155,859.76	None .....	819	0	819	107
15-16	171,018.52	62,400.00 (loan) .....	802	148	950	118
16-17	237,943.93	None .....	853	124	977	110
17-18	268,721.68	None .....	804	0	804	113
18-19	258,477.10	None .....	825	132	957	99
19-20	313,472.54	None .....	886	128	1014	141
20-21	167,505.16	112,842.11 (loan) ....	847	234	1081	124
21-22	126,118.07	150,000.00 (loan) .....	1007	301	1308	132
22-23	169,717.53	90,856.66 (Appr.)	1008	478	1486	134
23-24	220,329.00	91,813.14 (Appr.)	1057	535	1585	128
24-25	225,000.00	88,250.35 (Appr.)	1155	591	1648	145
25-26	225,000.00	123,657.36 (Appr.)	1021	484	1505	127

\* Not including Public Service supported by special state or U. S. appropriations.

\*\* Income from other sources now about \$75,000.00 annually.

Loan of 1915-16 repaid within three years.

Figures for 1925-26 are estimates.



**COLLEGE ACTIVITY****Calendar Year 1926****Estimated Expenditures:**

1. Superintendence and records -----	\$ 33,961.50
2. Collegiate Instruction * -----	281,265.37
3. Upkeep of Buildings and Grounds -----	38,009.95
4. Public Utilities -----	26,200.00
5. Summer School -----	5,000.00

**Total Normal Budget ----- \$384,436.82**

6. Dormitory for 200 cadets -----	100,000.00
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**Grand Total ----- \$484,436.82**

8. Interest on Clemson Bequest -----	\$ 3,512.36
9. Interest on Landscip -----	5,754.00
10. Morrill and Nelson Funds (U. S.) -----	25,000.00
11. Estimated Tuition and Fees -----	18,000.00
12. Estimated Rents and Misc. Receipts -----	20,000.00

**\$ 72,266.36**

13. Estimated Fert. Tax, 1925, ---	\$225,000.00
Less cost of inspection -----	37,180.00—
	<b>\$187,820.00</b>

**\$260,086.36**

14. Est'd balance January 1, 1926 -----	693.10
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**\$260,779.46**

**15. Necessary State Appropriations:**

(a) For maintenance (Sal's) \$123,657.36	
(b) For buildings (Dom'y) -- 100,000.00—	<b>\$223,657.36</b>

**Grand Total ----- \$484,436.82**

**General Comments on the Budget:**

The budget presented represents a normal budget as appropriated by the Board of Trustees at their meeting last July for the fiscal year 1925-26. It slightly differs in amount

\* Includes \$22,300 for scholarships.



from the budget of 1924-25. Some confusion is necessarily caused by the fact that the calendar year 1926 represents one-half of our 1924-25 budget and one-half of the 1925-26 budget, which latter budget is not yet made and cannot with certainty be predicted.

The legislature is requested to authorize the expenditure of Items 1 - 5 inclusive, contributing an appropriation of \$123,657.36 to "Personal Service", included in Item 2, "Collegiate Instruction." It would seem unwise to cover into the Treasury our estimated receipts of \$260,779.46 and burden the budget by over a quarter of a million dollars through re-appropriating this amount. The simplest and most logical plan is to appropriate only the amount necessary to be added to **the other sources of income** to maintain the work of the college at its present scope and level.

The cost of materials for shops and laboratories, and also the cost of equipment is still at a high level, and the cost is increased in proportion to the increased attendance.

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### EXPLANATION OF BUDGET ITEMS

#### 1.—Superintendence and Records—\$33,961.50)

Under this heading are included the salaries of teachers and the cost of operating the offices of the President, the Treasurer, the Registrar and the Director of Student Affairs. Aside from salaries the largest items are for travel, including the travel of the Trustees, Boards of Visitors, Legislative Committees, etc.

The amount under this heading (1) is about the same as the estimate for 1925, which was \$30,341.50.

#### Item 2.—Collegiate Instruction—(\$281,265.37)

Under this heading are included salaries, insurance, supplies for shops and laboratories, educational equipment and minor structural improvements. It also includes \$22,300.00 for scholarships.

The scale of salaries at Clemson is very moderate. Even during the period of inflation the total increase in our salaries was only about 22 percent. In technical colleges such as Clemson, salaries are usually higher than in non-technical



colleges because they have to compete with business corporations as well as with other colleges. In spite of that fact, the average salary at Clemson is probably lower than at any other state college for men, except the negro college at Orangeburg.

The figures below, compiled by the U. S. Bureau of Education in December 1922, show the average of 73 colleges and universities as compared with the average at Clemson. At Clemson **no rent-free houses or other perquisites are given.** Each officer receives a cash salary and nothing more.

### Salary Comparisons:

	Pres.	Déans or Director	Profs.	Assoc. Profs.	Asst. Profs.	Instr's
Averages of 73 Colleges and Universities	\$8,482	\$4,250	\$3,392	\$2,800	\$2,300	\$1,800
<b>Clemson Averages</b>	<b>6,000</b>	<b>3,650</b>	<b>2,808</b>	<b>2,288</b>	<b>2,035</b>	<b>1,625</b>

The item for shop and laboratory **supplies** at a college like Clemson, where the Freshman and Sophomore classes take a good deal of shop work, is necessarily large because of the consumption of steel, iron, wood, chemicals, glassware, etc. The college must pay these costs unless we follow the fashion of many other colleges of requiring the students to pay a shop and laboratory fee to cover them.

The item for **educational equipment** is also large in a technical college. Evidently most of the colleges classify this under operating expenses. It includes electrical instruments, microscopes, balances, pruning shears, agricultural implements, and a hundred other items necessary to give technical instruction and to keep technical laboratories up-to-date. To withhold these necessary facilities for teaching would be to betray the trust of students whose money and precious time are being devoted to the pursuit of an education.

### Item 3. Upkeep of Buildings and Grounds—(\$38,009.95)

Clemson College is a small village, consisting of twenty or more public buildings and more than sixty residences for teachers and officers. Not only must these buildings be kept in repair, but from time to time minor changes and additions are necessary due to increased demands as our attendance in-



creases. The college property of 1,560 acres, has twenty-one miles of road and about five miles of concrete and dirt side walks. The upkeep of these is an item of no small expense and importance.

**Item 4. Public Utilities—(\$26,200.00)**

Situated as it is in the country, Clemson has to maintain such public utilities as a heat, light and water plant, pumping stations, sewer system and the usual features of law enforcement common to a small village. Our coal consumption alone amounts to nearly 3,500 tons annually, representing over \$20,000 in money.

**Item 5. Summer School—(5,000):**

From small beginnings in 1910, Clemson College has gradually built up the second largest summer school in the state.

During the summer of 1924 we had an attendance upon this summer school of 484 students. In addition we had a large number of club boys, county agents and Smith-Hughes teachers in conference for a few days at intervals during the session of summer school. As usual we had few additional teachers and instructors, our own teaching force carrying on most of the summer work. The regular college facilities furnished the necessary shop, laboratory and library equipment used by the summer school students.

**Item 6. Dormitory for 200 cadets—(\$100,000):**

This is the first building at Clemson for which the legislature has been asked to appropriate money. This dormitory has been needed for several years past, but we have now come to the point where we can not longer do without it. This fall in 1925 we had 495 new students to seek admission. We actually admitted 365 or approximately three-fourths of those who applied. Not all who applied were prepared to enter, but the number of applicants indicate to some extent the demand for the kind of education which Clemson is giving. At the opening of this session we had to put **three men to the room in 108 rooms**, a condition unsatisfactory from the point of convenience, sanitation and of study. The additional dormitory would relieve the present congestion. These could



be handled without any material increase in the operating cost of the college.

The college plant at Clemson is incomplete in that it lacks a library building, a gymnasium and a suitable hospital. Additions to the textile, engineering and agricultural buildings are also badly needed.

## PART 11.—APPROPRIATIONS FOR PUBLIC SERVICE

The college is submitting **exactly the same estimate** for non-collegiate public service as was submitted in 1925. More work could be done if more money were available, but recognizing the condition of the state it has not been thought wise to suggest increases or extensions of the service for 1926. In the statement below there appears in the first column of figures the appropriations requested of the legislature. In the second column appear the funds which are received from other sources—

### Cost of Public Service—1926:

Activity	Legislative Appropriations Requested	Income from Other Sources	Total Resources
1. Fertilizer Ins. and Anal.....\$		\$ 37,180.00	\$ 37,180.00
2. S. C. Experiment Station.....		92,000.00	92,000.00
3. S.-L. Extension Service.....	110,862.85	156,014.49	266,877.34
4. Agri. & Cotton Research.....	75,000.00		75,000.00
5. Crop Pests and Diseases.....	10,000.00		10,000.00
6. Live Stock Sanitary Work.....	73,000.00		73,000.00
7. Hog Cholera Serum .....		25,000.00	25,000.00
Totals Budgeted .....	\$268,862.85	\$310,194.49	\$579,057.34
8. Funds administered but not actually handled by C. A. C.			
(a) No. 3, From Counties etc.....		\$145,830.00	\$145,830.00
(b) No. 4, U. S. Dept. Agri.....		25,000.00	25,000.00
(c) No. 6 U. S. D. A.....		30,000.00	30,000.00
Totals Available, Public Service	\$268,862.85	\$511,024.49	\$779,887.34

It will be noted from the table that for its appropriation of \$268,862.85 the state receives an agricultural service estimated at \$779.887.34. The lines of public service covered by the state's appropriations are so well known to the citizenship of the state and to members of the General Assembly that little explanation should be necessary.



**Items 1, 2, 7—(No Appropriations Requested):**

The fertilizer inspection and analysis, \$37,180.00, is paid from the fertilizer tax receipts. The S. C. Experiment station \$92,000.00, is paid from the Federal Hatch, Adams, and Purnell funds and the sale of farm products. The Hog Cholera Serum distribution, \$50,000.00, is financed from the sale of serum and biologics which are furnished to the farmers of the state at cost.

**Item 3. Smith-Lever Extension Service—(\$110,862.85):**

In 1914 the state of South Carolina accepted the terms of the Federal Smith-Lever Extension Act. This act provides for definite appropriations by the federal government on condition that certain moneys would be provided in the state. The annual appropriation made by the legislature reached its maximum in 1922 and the request for this year is the same as for the past three years. Through supplementary legislation the federal appropriations have been increased beyond the terms of the original Smith-Lever Act so that the state receives annually \$156,014.49.

The extension service is the only state-wide agricultural organization to which the state contributes, and which is maintained for the benefit of the people on the farms. It includes also the home demonstration work administered from Winthrop College, \$135,542.17 being expended in that line of service in 1924-25.

**Item 4. Agricultural and Cotton Research—(75,000.00):**

The agricultural research and boll weevil work have been combined under one item, the total of \$75,000 for the two remaining unchanged. This amount is the necessary supplementary fund to support the research work at the college, at the coast station near Summerville, and at the Pee Dee Station at Florence, and represents the entire amount spent by South Carolina for research work in that great profession in which eighty-five percent of our people are directly concerned. A single discovery which will even slightly reduce the large fertilizer bill of the state, or save an additional boll of cotton, or check the ravages of some plant disease or insect



pest, may easily be worth to the state in a single year the cost of all its research work for several decades.

The development of certain strains of wilt resistant cotton, notably the "Dixie-Triumph" is worth to the south more than the cost of the agricultural research for one hundred years.

The appropriation for boll weevil work was made for the first time in 1923 to enable the college to accept the proposition from the Federal Department of Agriculture to establish a parent station at Florence for investigating the various methods of poisoning and other processes looking to the control of the boll weevil. The work accomplished at this station appears in a special bulletin issued by the college. The importance of the results already obtained can hardly be overestimated and the field of study is too important and too attractive to be abandoned. It is evident from the results obtained at the Florence Station that poisoning is only one method and perhaps not the most important for producing cotton under boll weevil conditions. In the right variety, proper spacing, proper fertilization, and proper cultivation are likely to be found the most significant answer as to how cotton can be produced under boll weevil conditions.

**Item 5. Crop Pests and Diseases—(\$10,000.00):**

For this work no increase is requested. Perhaps no single appropriation for control work is more important or productive than this. But for the vigilance of the State Entomologist and the State Pathologist and their assistants, South Carolina would soon be the dumping ground for diseased seed, plants and nursery stock and be an unprotected territory for the invasion of plant diseases and insect pests. Many serious pests and diseases are at South Carolina's door and some of them have already gained a foothold. The work of the Crop Pest Commission is the sole protection which the state has against increased loss. The U. S. Department of Agriculture in a recent publication estimated that the loss in South Carolina due to plant disease alone amounted to more than twenty million dollars annually.



**Item 6. Live Stock Sanitary Work—(\$73,000.00.)**

Under this item are included tick eradication and other forms of regulatory work administered by the office in Columbia. No increase in the appropriation for this work is asked, although no doubt the amount could well be spent in the protection and promotion of an industry which represents in money more than the cotton crop of the state. The Live Stock Sanitary Board, which is in charge of the live stock sanitary work, is to live stock what the State Board of Health is to humans. Protection against the importation of diseased live stock, the control of contagious outbreaks such as hog cholera anthracnose, blackleg, etc. and the testing of dairy cows for tuberculosis, are a few of the activities of our sanitary office located in Columbia. With the necessity under boll weevil conditions of turning to a more diversified agriculture the amount and value of live stock have steadily increased. This is testified to by the excellent live stock exhibits at the last State Fair, and at the National Swine Show in October. As the industry increases the demand for veterinary service also increases. The appropriation requested represents less than one-tenth of one percent of the value of the live stock in South Carolina expended for its protection.

With this season's work, the State Veterinarian expects the freeing of the greater portion of the quarantined areas of South Carolina for the cattle tick. Work is being conducted only in Hampton, Jasper, Beaufort, Colleton, Dorchester, Charleston, Berkeley, Williamsburg, Georgetown and Horry Counties, all other counties having been freed of ticks. Splendid results are being effected in these counties.

The work of tuberculosis eradication is yet in its infancy as it were in this state, but has made wonderful strides, owing to the economic and public health value of the project of the state. Since the transmissibility of tuberculosis, to children especially, though impure milk is no longer a doubtful question, the necessity for this work is also unquestioned.

Hog cholera outbreaks continue to decrease in number and in seriousness. These are treated promptly and controlled in a very short time.



**In General:**

In presenting these appropriations, Clemson College regards itself as an agent to the legislature to carry out willingly and efficiently whatever lines of public service the legislature endorses, and to whatever extent it is willing to support them. The duty of the college is to recommend what is needed,—it is for the legislature to say how much of the service indicated should be done. The college does not feel that less should be appropriated than the amounts indicated, unless the work is to be reduced in volume and in value to the agricultural people of the state.

Respectfully submitted

S. B. EARLE,

Acting President, The Clemson Agricultural  
College, of South Carolina

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CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF  
TUITION AND HOLDING OF SCHOLARSHIPS**Abbeville County**

## Tuition—

Clark, J. H., Calhoun Falls.  
Graves, Paul Abbeville  
Roche, T. G., Abbeville.

## Free Tuition—

Cooly, T. F. Lowndsville.  
Davis, L. B., Due West.  
Ferguson, T. F. Ridgeway.  
Roche, A. O., Abbeville.

## Scholarship—

Bosler, A. H., Calhoun Falls.  
Tate, H. S., Abbeville.

**Aiken County**

## Tuition—

Haskell, A. C. Jr., North Augusta  
Kershaw, John North Augusta.  
Morgan, T. C., Aiken.  
Mitchell, R. H., North Augusta.  
Sudlow, W. H., Aiken.  
Salley, K. F., Salley.  
Wyman, E. H., Aiken.  
Williams, J. S., North Augusta.

## Free Tuition—

Albergottie, J. C., Aiken.  
Brodie, G. H., Salley.  
Carpenter, J. D., Aiken.  
Edgerton, E. W., Aiken.  
Garvin, B. W., Seivern.  
Garvin, C. W. Seivern.  
Hafers, E. P., Aiken.  
Johnson, C. P., Aiken.  
Keenan, H. E., Granetsville.  
Simkins, L. H., North Augusta.  
Salley, H. D., Salley.  
Salley, C. T., Salley.  
Smith, S. L., Granetsville.  
Salley, L. J., Salley.  
Stellings, R. N., North Augusta.  
Weeks, W. S., Aiken.

## Scholarship—

Culler, R. B., Kitchens Mill.  
Creighton, J. T., Aiken.  
Gunter, O. C., Wagner, S. C.  
Weathersbee A. A., Ellenton.

**Allendale County**

## Tuition—

Bryan, C. A., Allendale.  
Calhoun, W. B., Baldock.  
Guess, J. P., Appleton.  
Googe, W. J., Fairfax.  
Hewlett, L. M., Appleton.  
Stoney, P. D., Allendale.

## Free Tuition—

Keel, J. H., Allendale.  
Maner, W. F., Allendale.

## Scholarship—

Fennell, H. A., Allendale.  
Tison, P. H., Allendale.  
Youmans, M., Fairfax.

**Anderson County**

## Tuition—

Bell, J. L., Anderson.  
Brown, W. C., Belton.  
Brown, W. F., Anderson.  
Chambler, A. D., Anderson.  
Chapman, W. E., Pendleton.  
Cox, E. R., Belton.  
Cox, F. M., Belton.  
Drake, T. F., Anderson.  
Dalrymple, C. L., Pendleton.  
Earle, J. E., Starr.  
Elrod, W. S., Anderson.  
Embler, J. E., Townville.  
Griffin, E. L., Belton.  
Ginn, R. J., Anderson.  
Glenn, W. L., Anderson.  
Gilmer, F. S., Anderson.  
Herron, J. L., Starr.  
Hodges, B. H., Starr.  
Keasler, G. S., Pendleton.  
Kay, W. H., Honea Path.  
Kelly, W. G., Pelzer.  
Long, J. T., Anderson.  
Lyons, J. J., Anderson.  
Martin, S. P., Pendleton.  
Marchbanks, J. C., Anderson.  
Major, S. M., Belton.  
Major, J. D., Belton.  
McLees, F. C., Townville.  
McGee, E. T., Starr.  
McGill, C. A., Anderson.



CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF  
TUITION AND SCHOLARSHIPS—(Continued)

Pepper, W. C., Anderson.  
Pruitt, A., Anderson.  
Richardson, M. B., Pendleton.  
Sullivan, M. M., Anderson.  
Smith, J. E., Pendleton.  
Stickland, Paul Belton.  
Stevenson, N. W., Anderson.  
Stewart, E. C., Pelzer.  
Smith, R. L., Starr.  
Smith, B. M., Starr.  
Pruitt, J. M., Anderson.  
Pruitt, R. S., Anderson.  
Todd, J. A., Starr.  
Wilson, G. C., Honea Path.

Free Tuition—

Alexander, S. R., Anderson.  
Burriss, J. L., Anderson.  
Burriss, Luther J., Anderson.  
Babb, Jack Pelzer.  
Campbell, T. A. Jr., Anderson.  
Cummings, R. L., Belton  
Cannon, J. P., Honea Path.  
Chrietzberg, C. H., Williamston  
Chapman, W. F., Belton  
Coon, H. E., Anderson  
Cooper, J. R., Belton  
Clark, W. H., Pendleton  
Cheek, T. H., Iva  
Drake, H. B., Pelzer  
DeYoung, D. F., Belton  
Darby, J. M., Sandy Springs  
Gerraed, F. H., Anderson  
Garrison, R. H., Sandy Springs  
Garrison, N. A., Sandy Springs  
Griffin, R. L., Anderson  
Hall, F. B., Iva  
Hudgens, W. W., Williamston  
Harris, S. P., Belton  
Hawkins, C. E., Starr  
Heller, J. N., Sandy Springs  
Hayes, B. M., Anderson  
Heller, W. F., Sandy Springs  
Jameson, P. H., Liberty  
Jackson, S. L., Anderson  
Johnson, H. E., Anderson  
King, J. L., Belton  
Kay, R. W., Honea Path.  
King, J. I., Anderson  
Kay, C. W., Belton  
Little, T. R., Starr

Littlejohn, H. A., Belton  
Littlejohn, C. M., Belton  
Moore, J. N., Belton  
Mason, W. B., Belton  
Marshall, J. C., Anderson  
Martin, W. E., Anderson  
McClellan, G. W., Anderson  
McConnell, R. E., Anderson  
McPhail, J. W., Anderson  
Nickles, W. P., Pelzer  
Patterson, S. N., Williamston  
Pruitt, W. R., Anderson  
Rogers, C. M., Anderson  
Smith, E. T., Anderson  
Stastny, R. F., Anderson  
Sword, P. E., Central  
Turner, G. E., Anderson  
Welborn, M. B., Pendleton  
Pruitt, W. H., Anderson.  
Wooten, W. H., Fair Play  
Wallace, J. C., Pendleton  
Webb, J. A., Anderson  
Welborn, H. W., Pendleton

Scholarship—

Burgess, R. H., Belton  
Bagwell, J. C., Honea Path.  
Cromer, N. C., Williamston  
Farmer, W. A., Anderson  
Massey, L. B., Pendleton  
McAlister, L. C., Pendleton  
Picklesimer, D. L., Piedmont  
Reid, L. B., Anderson  
Smith, E. L., Anderson  
Smith, G. A., Anderson  
Weigle, C. C., Belton

**Bamberg County**

Tuition—

Cooper, P. F., Denmark  
Faust, C. C., Denmark  
Mayfield, J. T., Denmark  
Turner, J. A., Denmark  
Watson, E. C., Bamberg

Free Tuition—

Chandler, J. H., Bamberg  
Carter, W. H., Bamberg  
Fogle, J. L., Denmark  
Hutto, D. F., Bamberg  
Hope, G. M., Denmark



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

Hightower, R. E., Denmark  
 Jones, R. C., Bamberg  
 Kirsch, W. A., Bamberg  
 Price, L. C. J., Bamberg  
 Price, G. E., Bamberg  
 Wiggins, L. E., Bamberg  
 Zegler, R. L., Denmark

## Scholarship—

Hutto, S. G., Denmark  
 Padgett, A. B., Bamberg

## Barnwell County

### Tuition—

Brabham, H. K., Bamberg  
 Killingsworth, H. M., Barnwell  
 Lott, G. B., Williston

### Free Tuition—

Hair, J. C., Blackville  
 Holmes, R. H., Barnwell  
 McKerley, J. B., Elko  
 Turner, W. B., Ellenton.  
 Walker, J. E., Blackville  
 Woodward, M. H., Barnwell

### Scholarship—

Turner, C. M., Ellenton  
 Youngblood, J. E., Elko

## Beaufort County

### Tuition—

Levin, J. D., Beaufort  
 McLeod, C. E., Beaufort  
 McDaniel, S. W., Beaufort  
 McDaniel, C. D., Beaufort

### Free Tuition—

Evans, J. K., Beaufort  
 Marshall, R. M., Beaufort  
 Rubinswizt, Benj., Beaufort  
 Sanders, Edward, Okatee

## Berkeley County

### Tuition—

McConts, A. W., Monks Corner.

### Scholarship—

Rudloff, C. N., Pinopolis.  
 Smith, J. E., St. Pinopolis.

## Calhoun County

### Tuition—

Cox, H. A., St. Matthews.

### Free Tuition—

Hane, H. T., Fort Motte  
 Hane, W. W., St. Matthews.  
 Hane, J. K., Fort Motte.  
 Hane, A. W., St. Matthews.  
 Paulling, J. R., Jr., St. Matthews  
 Taber, W. P., Fort Motte.

### Scholarship—

Herlong, E. S., St. Matthews.  
 Smoke, W. G., St. Matthews.

## Charleston County

### Tuition—

Fishburn, F. J., Charleston.  
 Gimball, A. H., Charleston.  
 Knoblock, L. G., Charleston.  
 Messervy, L. C., Meggetts.  
 Prause, O. B., Charleston.  
 Stapplemen, H. E., Charleston.  
 Stello, L. T., Charleston.  
 Stringfellow, W. K., Charleston.  
 Waller, P. F. W., Myers.  
 Welling, C. E., Charleston.  
 Weiters, H. C., Charleston.  
 Smith, E. D., Charleston.

### Free Tuition—

Bunch, R. L., Charleston.  
 Blakney, L. R., Pageland.  
 Darby, C. P., Mt. Pleasant.  
 Metz, G. E., Charleston.  
 Porcher, P. G., Mt. Pleasant.  
 Reid, D. A., Charleston.  
 Stevens, J. T., Youngs Island.  
 Silcox, D. H., Mt. Pleasant.  
 Townsend, T. S., Martins Point.

## Cherokee County

### Tuition—

Brown, T. L., Gaffney.  
 Creech, J. C., Gaffney.  
 Gaines, E. H., Gaffney.  
 Hall, R. E., Gaffney.  
 Hall, J. H., Gaffney.  
 Hoyle, Claude Blacksburg.  
 McCraw, F. Z., Gaffney.  
 Poole, P. O., Gaffney.  
 Cooksey, R. H., Blacksburg.  
 Clancy, M. V., Gaffney.  
 Gaffney, H. E., Gaffney.  
 Hambright, W. A., Kings Creek.



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

Harvey, B. C., Gaffney.  
King, J. N., Jr., Gaffney.  
Lipscombe, R. W., Gaffney.  
Lavender, D. R., Gaffney.  
McCraw, L. G., Gaffney.  
Sparks, R. H., Gaffney.  
Smith, R. E., Blacksburg.  
Woodside, H. R., Gaffney.

## Scholarship—

Godfrey, A. B., Gaffney.  
Mullins, H. D., Gaffney.  
Starnes, M. A., Blacksburg.

## Chester County

### Tuition—

Anderson, J. B., Richburg.  
Etters, F. E., Chester.  
Etters, C. W., Chester.  
Hollis, P. T., Chester.  
Jordan, R. C., Richburg.  
Jordan, J. A., Richburg.  
Tibbs, R. H., Great Falls.  
Wooten, R. B., Lewis Turnout.

### Free Tuition—

Anderson, W. M., Chester.  
Bell, C. M., Chester.  
Bell, S. L., Chester.  
Darby, J. E., Lowryville.  
Funderburk, O. F., Great Falls.  
Gibson, E. W., Richburg.  
Harden, J. C., Chester.  
Hardee, J. H., Lowryville.  
Murr, B. L., Chester.  
Melton, L. H., Chester.  
Massabeau, W. A., Chester.  
McKeown, S. M., Cornwell.  
Sanders, J. H., Chester.  
Sanders, J. R., Chester.  
Simpson, W. N., Richburg.

### Scholarship—

Grant, W. H., Chester.  
White, W. A., Chester.

## Chesterfield County

### Tuition—

Hendrix, F. S., Cheraw.  
Knight, T. M., Cheraw.

### Free Tuition—

Buie, G. S., Patrick.

Cato, J. B., Pageland.  
Evans, J. C., Cheraw.  
Jowers, H. C., Angelus.  
Knight, J. D., Angelus.  
Miller E. E., Jefferson.  
Middleton, J. E., McBee.

### Scholarship—

Baker, W. L., Jefferson.  
Knight, W. E., Pageland.  
Thrower, J. H., Cheraw.

## Clarendon County

### Tuition—

Davis, M., Summerville.  
Millette, E. L., Summerville.  
McIntosh, C. H., New Zion.  
Ross, W. M., Summerton.  
Richardson, E. H., Summerton.  
Watts, L. R., Summerton.

### Free Tuition—

Bradley, W. W., Manning.

### Scholarship—

Heriott, L. W., Manning.  
Ridgeway, E. J., Manning.  
Timmerman, J. H., Manning.  
Wilson, C. J., Manning.

## Colleton County

### Tuition—

Fishburn, J. T., Walterboro.  
McCarter, H., Smokes.  
McTeer, J. R., Walterboro.

### Free Tuition—

Breeland, A. D., Cottageville.  
Bennett, W. M., Ashton.  
Beach, A. K., Walterboro.  
Corbett, T. B., Colleton.  
Kinard, J. A., Ruffin.  
Pargett, L. C., Green Pond.  
Reeves, T. M., Cottageville.  
Thomas, J. H., Ruffin.

### Scholarship—

Padgett, J. M., Jacksonsboro.  
Smith, R. H., Smokes.  
Sanders, K. B., Walterboro.  
Tuten, W. A., Jacksonboro.

## Darlington County

### Tuition—

Boseman, T. R., Darlington.  
Boseman, J. C., Darlington.



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

Gillespie, S. L., Hartsville.  
 Hicks, M. H. Hartsville.  
 Hicks, J. A., Hartsville.  
 Jefford, A. U., Lamar.  
 Pruitt, J. E., Lamar.  
 Stokes, K. E., Darlington.  
 Winburne, H. E., Hartsville.  
 White, R. B., Hartsville.

## Free Tuition—

Allen, C. C., Darlington.  
 Britt, J. O., Timmons ville.  
 Dorgan, W. C., Darlington.  
 DuBose, J. M., Hartsville.  
 Dove, W. S., Dovesville.  
 Hicks, J. R., Hartsville.  
 Jeffords, C. H., Darlington.  
 Lewis, J. M., Darlington.  
 Lewis, W. M., Darlington.  
 McLeod, J. B., Hartsville.  
 Rhodes, C. F., Darlington.  
 Rhodes, W. A., Darlington.  
 Stogner, J. R., Hartsville.  
 Stokes, T. L., Timmons ville.  
 Weeks, A. R., Lamar.

## Scholarship—

Flowers, H. B., Darlington.  
 Howle, J. P., Hartsville.  
 Jordon, E. H., Timmons ville.  
 Law, J. M., Darlington.

## Dorchester County

### Tuition—

Byrd, W. L., St. George.  
 Rickborn, J. H., Reevesville.  
 Robbins, L. L., St. George.  
 Van de Erve, J. M., Summerville.

### Free Tuition—

Kirby, K. M., St. George.

### Scholarship—

Kyzer, H. F., St. George.

## Dillon County

### Tuition—

Ford, J. G., Lake View.  
 Ford, P. T., Lake View.  
 Hayes, T. W., Latta.  
 McCormac, E. L., Dillon.  
 McCormac, E. A., Dillon.  
 McCormac, J. H., Dillon.

### Free Tuition—

Williamson, J. W., Hamer.

## Scholarship—

Gaddy, M. V., Dillon.  
 McLeod, T. E., Bingham.  
 McLeod, N. A., Bingham.

## Edgefield County

### Tuition—

Day, C. B., Trenton.  
 Salters, F. S., Trenton.  
 Watson, S. J., Johnston.

### Scholarship—

Pardue, W. A., Trenton.  
 Stram, J. R., Edgefield.

## Florence County

### Tuition—

Atkinson, J. M., Florence.  
 Anderson, M. H., Timmons ville.  
 Anderson, C. E., Timmons ville.  
 Anderson, O. S., Timmons ville.  
 Bryce, G. W., Florence.  
 Bryce, G. T., Florence.  
 Farmer, R. E., Florence.  
 Finklea, J. D., Florence.  
 Holman, F. W., Florence.  
 Henry, S. W., Timmons ville.  
 Husbands, Henry Florence.  
 Jones, M. H., Florence.  
 Jones, J. A., Florence.  
 Kelly, G. M., Olanta.  
 Stone, W. G., Effingham.  
 Savarence, R. C., Timmons ville.  
 Stewart, J. D., Florence.

### Free Tuition—

Askin, H. W., Timmons ville.  
 Carter, T. H., Timmons ville.  
 Finklea, G. I., Hyman.  
 Humphrey, C. J., Timmons ville.  
 Hodge, J. H., Timmons ville.  
 Hinson, L. O., Scranton.  
 Hawkins, G. E., Timmons ville.  
 Hatchell, R. E., Florence.  
 Moore, P. W., Florence.  
 McDaniel, W. C., Lake City.  
 McGowan, J. F. J., Florence.  
 Parker, Geo. F., Ebenezer.  
 Ross, D. H., Florence.  
 White, L. B., Timmons ville.  
 Whitton, J. E., Florence.



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

## Scholarship—

Hinson, H. S., Lynchburg.  
Jordan, T. G., Florence.  
Mathews, J. D., Coward.  
McGowan, R. W. Florence.  
McLaughlin, R. D., Effingham.  
Purvis, E. R., Florence.  
Shands, W. A., Ebenezer.

## Fairfield County

### Tuition—

Blair, J. W., Blairs.  
Macfie, W. H., Winsboro.  
Wright, J. B., Shelton.

### Free Tuition—

Burley, F. A., Monticello.  
Coleman, A. B., Ridgeway.  
Jennings, F. C., Winsboro.  
Jeter E. C., Wallaceville.  
McMeekin, R. P., Jenkinsville.  
Robinson, C. A., Winsboro.  
Stevenson, R. C., Winsboro.  
Tennant A. B., Winsboro.

### Scholarship—

Elliott, W. R., Winsboro.  
Yarborough, H. W., Wallaceville

## Georgetown County

### Tuition—

Donaldson, J. H., Georgetown.  
Higgins, R. C., Georgetown.  
LaBruce, A. F., Georgetown.  
Mercer, C. W., Georgetown.  
Ward, H. P., Georgetown.  
Westburg, J. E., Georgetown.

## Greenville County

### Tuition—

Allison, H. M., Greenville.  
Allen, C. S., Greenville.  
Beam, F. A. Pelzer.  
Beam, H. F., Pelzer.  
Beason J. T., Simpsonville.  
Cuttino, W. H., Greenville.  
Coleman P. W., Greenville.  
Carpenter, E. W., Greenville.  
Campbell, M. M., Greenville.  
Crosbey H. G., Piedmont.  
Curdts, E. C., Greenville.  
DuVerent, W. R., Greenville.

Eskeu, H. L., Greenville.  
Fayssoux, F. S., Greenville.  
Jacobi, L. W. R., Greenville.  
Jones, S. E., Greer.  
James, F. G., Greer.  
Kitchen T. W., Greenville.  
Limberger, C. H., Greenville.  
Moore, R. J., Simpsonville.  
Norris, J. G. Piedmont.

### Tuition—

Robinson, J. H., Jr., Greenville.  
Rutledge, J. R., Greenville.  
Rosemond, J. E., Greenville.  
Rose A., Greenville.  
Rinach, M. M., Greenville.  
Sweeney, D. F., Greenville.  
Sadler, J. K., Greenville.  
Shull, W. G., Greenville.  
Tarrant, W. E., Piedmont.  
West, C. P., Greenville.  
White, A. H., Greenville.  
Yeager, Thos. J. Greenville.

### Free Tuition—

Austin, P. B., Greenville.  
Alleson, L. D., Greenville.  
Alexander, J. S., Greenville.  
Bates, P. G., Maretta.  
Burdett J. M., Pelzer.  
Bouman, R. C., Greenville.  
Batson, J. P., Greenville.  
Chapman, A. H., Greenville.  
Corbin, J. F., Greenville.  
Cox, W. H., Simpsonville.  
Cox, W. A., Greenville.  
Cureton, R. H. Greenville.  
Dill, C. P., Greenville.  
Davis, B. W., Greenville.  
Fowler, B. R., Greenville.  
Green, J. W., Greenville.  
Galloway, W. C. Greenville.  
Green, G. H., Greer.  
Henderson, H. J., Greer.  
Holohan, R. F., Greenville.  
Hunter, H. M., Greenville.  
Jones, W. L., Greer.  
James W. C., Greer.  
Mortin, W. N., Greenville.  
Perry, C. F., Greenville.  
Ross W. A., Pelzer.



CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF  
TUITION AND SCHOLARSHIPS—(Continued)

Satterfield, Mose Simpsonville.

Simmons, G. G., Greenville.

Smith, W. C., Greenville.

Smith, J. R., Greenville.

Stewart T. C., Simpsonville.

Walsh, A. A., Greenville.

Wright, G. F., Greenville.

Williams, W. B., Greenville.

## Scholarship—

Crain, M. C., Taylors.

Dorn, T.E. Jr., Greenville.

James, J. H., Greer.

Pope, T. H. Jr., Greenville.

Shanklin, J. A., Greer.

Taylor, H. L., Greer.

**Greenwood County**

## Tuition—

Bailey, M. A., Greenwood.

Emeron, R. W., Hodges.

Henderson, W. W., Verdery.

Hartzog, H. G., Greenwood.

Rodgers, H. W., Callison.

Rhodes, S. B., Gaines.

Seago, J. A., Greenwood.

Sanders, H. I., Ninety Six.

Tolbert, J. N., Greenwood.

Tinsley, H. L., Hodges.

Williams, B. L., Ninety Six.

## Free Tuition—

Bowls, H. J., Greenwood.

Cockran, G. B., Donalds.

Ellis, E. S., Greenwood.

Hitt, J. C., Greenwood.

Kinard, H. H., Ninety Six.

Meachan, T. B., Greenwood.

Milling, J. A., Greenwood.

Owens, S. G., Greenwood.

Richey, B. R., Ware Shoales.

Rykard, R. H., Greenwood.

Westmoreland, J. W., Greenwood.

Williams, J. H., Greenwood.

## Scholarship—

Durst, W. P. Jr, Greenwood.

Earle, J. W., Greenwood.

Martin, L. K., Ninety Six.

Presley, W. H., Verdery.

Rasor, H. L., Donalds.

**Hampton County**

## Tuition—

Garnett, J. K., Garnett.

Lawton, B. M., Lena.

Maner, J. K., Garnett.

## Free Tuition—

Fennell, C. S., Hampton.

Kearse, F. G., Crockettville.

Williams, H. L., Brunson.

## Scholarship—

Mason, R. S., Estill.

Miley, Percy., Brunson.

Patrick, C. H. Jr., Varnville.

**Horry County**

## Tuition—

Causey, O. R.,

Chadbourn, N. C. R. F. D.

Harrellson, O. M., Loris.

King, C. B., Myrtle Beech.

Page, Williams, Aynor.

Sessions, J. C., Conway.

## Scholarship—

Long, C. A., Conway.

Smith, I. T., Conway.

**Jasper County**

## Scholarship—

Parnell, C. L., Gillisonville,

Wilson, F. E., Ridgeland,

**Kershaw County**

## Tuition—

DeLoache, E. C., Camden,

DeLoache, L. D., Camden,

Davidson, L. S., Camden,

Hinson, E. M., Blakney,

Jones, W. E., Bethune.

Ratcliff, B. H., Lucknow,

Truesdale, E. V., Kershaw,

Wallace, J. J., Camden,

Wooten, F. M., Camden,

## Free Tuition—

Croxtton, R. D., Kershaw,

Kirkland, C. R., Camden,

Kirkland, R. R., Camden,

Lipscombe, V. J., Camden,

Montgomery, J. R., Camden,

Montgomery, S. M., Camden,

Smith, J. B., Bethune.



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

## Scholarship—

Clark, T. H., Camden,  
Goodale, T. E., Camden,  
Smith, A. J. Jr., Bethune.

## Laurens County

### Tuition—

Buford, J. A., Clinton.  
Bailey, T. L. W., Clinton,  
Bolt, G. W., Laurens,  
Boyce, M. O., Cross Hill,  
Cook, J. B., Fountain Inn,  
Carter D. E., Clinton,  
Cook, L. A., Fountain,  
Dial, W. A., Cross Hill,  
Nance, R. D., Cross Hill,  
Pinson, M. C., Cross Hill,  
Philphot, C. P., Laurens,  
Taylor, W. H., Laurens,  
Taylor, H. K. Laurens,  
Workman, C. R., Goldville,  
Wallace, R. W., Gray Court,

### Free Tuition—

Albright, W. V., Laurens,  
Burgess, J. T., Lanford Station,  
Boyd, D. H., Mountville,  
Cannon, A. M., Mountville,  
Counts, R. H., Laurens,  
Fleming, J. M., Lanford Station,  
Madden, W. L., Mountville,  
Ropp, J. W., Cross Hill,  
Thompson, G. L., Gray Court,  
Vaughn, T. E., Fountain Inn,  
Watson, W. T., Laurens.

### Scholarship—

Boyd, J. A., Laurens,  
Hamilton, T. D., Laurens,  
Holmes, J. S., Mountville,  
Steer, R. D., Clinton,

## Lancaster County

### Tuition—

Bailes, W. B., Fort Milles,  
Bails, J. M., Fort Milles.  
Croxtton, E. M., Lancaster,  
Dobson, C. R., Lancaster,  
Stewman, Leonard,, Lancaster,  
Stewman, W. S., Jr., Lancaster,

### Free Tuition—

Blakeney, L. B., Lancaster,  
Elms, H. S., Fort Mills,

Neal, A. J., Heath Springs,  
Plyler, D. P., Lancaster,  
White, J. E., Osceola,  
Wolfe, O. F., Lancaster,

## Scholarship—

Alexander, E. R., Fort Mill,  
Blakeney, C. R., Lancaster,  
Outen, D. L., Kershaw,

## Lee County

### Tuition—

Galloway, J. D., Bishopville,  
Woodham, J. B., Bishopville.  
McCutcheon, J. H. Jr., Bishopville,  
Reynalds, P. H. Jr., Bishopville.  
Shaw, R. J., Elliott.  
Stuckey, D. C., Bishopville.  
Witherspoon, J. H., Meyesville.

### Free Tuition—

Cunningham, W. R., Bishopville.  
Free, J. A., Bishopville.  
Smith, E. D., Bishopville.  
Thomas, G. W., Bishopville.

## Scholarship—

Lemmon, J. M., Lynchburg.

## Lexington County

### Tuition—

Caughman, E. M., Lexington  
Etheredge, T. J., Batesburg  
Franklow, M. L., Leesville.  
Marvin, H. W., Batesburg.  
Timmerman, W. P., Batesburg.  
Whitt, L. H., Swansea.  
Wingard, B. F., Lexington.

### Free Tuition—

Barr, C. M., Leesville  
Cullum, F. E., Batesburg  
Crowson, J. K., Batesburg  
Dowling, C. B., Swansea  
Kinard, F. W., Leesville  
King, D. B., Swansea  
Williams, M. L., Swansea

## Scholarship—

Corley, S. R., Lexington  
Culler, F. N., Swansea  
Hendrix, S. H., Lexington



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

## Marlboro County

### Tuition—

Manning, F. C., Clio  
 Avent, J. K., Bennettsville  
 Avent, J. J., Jr., Bennettsville  
 Bethea, T. J. McCall  
 Bethea, W. M., McCall  
 Bristow, G. J., McCall  
 Covington, J. B., Bennettsville  
 Fletcher, E. G., McCall  
 Huckabee, J. C., Bennettsville  
 Hodges, H. M., Brownsville  
 Mangum, W. S., McCall  
 McCall, H. G., McCall  
 Napier, C. D., Blenheim  
 Parker, J. W., McCall  
 Reynolds, C. M., Bennettsville  
 Tatum, B. M., McCall

### Free Tuition—

Bennett, G. J., McCall  
 Easterling, K. S., Bennettsville  
 Fletcher, J. L., Bennettsville  
 Liles, S. E., McCall  
 Miller, L. R., Bennettsville  
 Miller, P. H., Tatum  
 Smoot, J. T., McCall  
 Shuford, G. A., McCall  
 Spear, H. B., Tatum  
 Welch, W. F., Clio  
 Wilkes, W. M., Clio  
 Wright, P. G., Clio

### Scholarship—

Anderson, R. D., Bennettsville  
 Barrington, W. L., Gibson N. C.  
 Newton, Raleigh, Gibson, N. C.  
 Smith, M. M., Clio

## Marion County

### Tuition—

Harrell, J. C., Marion  
 Herring, W. H., Marion  
 Johnson, J. C., Marion  
 Smith, T. L., Marion  
 Shelley, L. W., Marion  
 Williams, G. P., Mullins

### Free Tuition—

Craven, W. H., Gresham  
 Dunn, S. B., Hamer  
 Godyear, C. P., Nichols  
 Mace, K. M., Mullins

McMilliam, F. W., Mullins

Rogers, C. M., Mullins

Rogers, V. M., Mullins

Smith, R. E., Centenary

White, H. A., Centenary

### Scholarship—

Jones, G. L., Mullins

## McCormick County

### Tuition—

Blackwell, W. G., Parksville

Corvin, W. F., Willington

Parker, W. E., Troy

### Free Tuition—

Adams, L. C., Merewether

Britt, C. E., McCormick

Blackwell, F. M., McCormick

Sheppard, W. E., McCormick

### Scholarship—

Brown, H. C., McCormick

Tolbert, J. H., McCormick

## Newberry County

### Tuition—

Huffman, W. C., Little Mountain

Long, L. S., Prosperity

Major, J. M., Whitmire

Sanders, V. C., Newberry

Smith, C. T., Kinards

### Free Tuition—

Aull, J. L., Pomaria

Epting, J. C., Little Mountain

Shealy, N. P., Prosperity

Sease, E. C., Prosperity

Sease, R. E., Prosperity

Watkins, A. W., Chappell

Wise, G. C., Prosperity

### Scholarship—

Goree, I. M., Newberry

Kibler, J. W., Pomaria

Smith, D. E., Kinards

## Oconee County

### Tuition—

Bryan, W. W., Clemson College

Bradley, M. E., Clemson College

Bearden, C. E., Seneca

Cross, J. B., Westminster

Gignilliat, G. W., Seneca

Garrison, C. R., Seneca

Holmes, A. G., Clemson College



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

Heller, J. R., Seneca.  
 Hollman, J. L., Seneca  
 Johns, J. H., Westminister  
 Mason, F. W., Westminister  
 Martin, B. V., Clemson College  
 Norton, J. J. Jr., Seneca  
 Norton, W. L., Seneca  
 Newman, C. C., Clemson College  
 Ramsey, W. T., Madison  
 Seaborn, W. M., Walhalla  
 Seaborn, L. A., Walhalla  
 Stribling, D. W., Westminister  
 Thomson, D. P., Seneca

## Free Tuition—

Abbott, W. B., Walhalla  
 Burley, J. A., Walhalla  
 Burley, J. E., Walhalla  
 Brown, H. A., Westminister  
 Collings, H., Walhalla  
 Cox, S. M., Seneca  
 Carey, F. L., Seneca  
 Cromer, L. E., Seneca  
 Duggon, O. R., Seneca  
 Gillispie, D. D., Seneca  
 Gillispie, B. B., Seneca  
 Hetrick, J. P., Walhalla  
 Jones, A. S., Walhalla  
 Moon, C. T., Seneca  
 McPhail, Shubert Townville  
 Stribling, T. S., Seneca  
 Spencer, B. M., Madison  
 Teal, A. O., Westminister  
 Todd, J. N., Walhalla

## Scholarship—

Harvey, G. C., Westminister  
 Norris, J. A., Newry  
 McPhail, M., Townville  
 Wilbanks, B. H., Clemson College

## Orangeburg County

### Tuition—

Brunner, J. W., Orangeburg  
 Buie, J. A. E., Branchville  
 Cannon, W., Orangeburg  
 Edwards, R. M., Ellore  
 Gilmore, H. S., Holly Hill  
 Knotts, F. L., North  
 Knotts, W. T., North  
 Porter, L. A., Springfield  
 Sheppard, B., Orangeburg

Smith, T. E., Rowesville  
 Strowman, W. F., Woodruff  
 Tyler, R. T., Orangeburg  
 Thackston, A. J. Jr., Orangeburg  
 Vincent, W. W., Orangeburg  
 Vallentine, J. G., Cope  
 Whetstone, G. B., North  
 Wilson, G. V., Bowman.  
 Whetsell, M. H. Bowman  
 Whetsell, J. A., Parler

## Free Tuition—

Albrechat, R. T., Orangeburg  
 Ayers, D. C., Orangeburg  
 Austin, J. W., Orangeburg  
 Bauldin, H. L., Orangeburg  
 Barton, L. S., Orangeburg  
 Byrd, H. L., North  
 Culler, E. W., Orangeburg  
 Early, E. B., Orangeburg  
 Fulmer, C. E., Cope  
 Glaze, C. H., Orangeburg  
 Hayden, E. C., Cope  
 Herbert, D. O., Orangeburg  
 Hart, L. W., Vance  
 Hayden, L. S., Orangeburg  
 Hayden, T. J., Rowesville  
 Jackson, L. S., Orangeburg  
 Keitt, D. H., Orangeburg  
 Lee, S. A., Orangeburg  
 Mosley, J. W., Orangeburg  
 O'Cain, H. F., Orangeburg  
 Reed, B. W., North  
 Stoutamire, H. L., Holly Hill  
 Sheriff, J. M., Orangeburg  
 Thomas, J. R., Cope  
 Thompson, E. A., Reevesville  
 Traxler, W. C., Bowman  
 Ulmer, J. C., Ellore  
 Zeigler, H. J., Orangeburg

## Scholarship—

Baker, J. H., Orangeburg  
 Hart, T. J., Vance  
 Sykes, L. C., Orangeburg

## Pickens County

### Tuition—

Brock, J. L., Central  
 Finley, H. L., Easley  
 Klugh, W. W. Jr. Clemson College



CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF  
TUITION AND SCHOLARSHIPS—(Continued)

Lenhardt, B. F., Easley, S. C.  
McHugh, R. S., Clemson College  
Rowland, J. R., Central  
Sutherland, E. S., Pickens  
Sutherland, J. L., Pickens  
Vandiver, E. H., Calhoun

## Free Tuition—

Arnold, T. R., Central  
Barrs, T. A., Clemson College  
Breedlore, Walter, Six Mile  
Carter, E. F., Liberty  
Carson, S. C., Central  
Chapman, Hoyt, Calhoun  
Gantt, J. H., Pickens  
Garrison, J. C., Easley  
Garvin, J. P., Norris  
Hester, J. B., Easley  
Jones, O. F., Easley  
Meredith, P. F., Central  
O'Dell, W. R., Liberty  
Philips, C. Y., Norris  
Partridge, J. F., Pickens  
Palmer, E. D., Central  
Roark, R. B., Pickens  
Roark, D., Pickens  
Russell, H. E., Easley  
Tate, T. B., Norris

**Richland County**

## Tuition—

Anderson, R. N., Columbia.  
Asbill, C. M., Columbia  
Cobb, W. H., Columbia  
Carter, S. T., Columbia  
DuPre, G. C. Columbia  
Darby, J. P., Columbia  
Guy, J. H., Columbia  
Harling, J. H., Columbia  
Hamrick, S. W., Columbia  
Hennant, J. L., Blythwood  
Koon, O. R., Peak  
Kitchens, L. A., Columbia  
Kirby, C. E., Columbia  
Mundy, J. T., Columbia  
Roy, W. R., Columbia  
Sandel, F. L., Jr., Columbia  
Stork, W., Columbia  
Zable, T. C., Columbia

## Free Tuition—

Bauer, J. W., Columbia  
Brockman, E. W., Columbia

Bradley, T. L., Columbia  
Cannon, E. A., Blythewood  
Causley, J. E., Columbia  
Ellis, E. W., Columbia  
Harmon, S. E., Columbia  
Henderson, E. M., Columbia  
Koon, H. E., Peak  
Leithner, J. A., Irmo  
Leitzsey, F. B., Columbia  
Lanford, C. H., Blythewood  
Maxwell, R. E., Columbia  
McGill, T. J., Columbia  
Powell, E. M., Columbia  
Shelamer, H. D., Columbia  
Caughman, J. B., Columbia

## Scholarship—

Cannon, F. P., Blythewood  
Coleman, H. C., Hopkins  
Douglas, C. V., Columbia  
Jones, M. A., Columbia  
Lomas, C. H., Columbia  
McCracken, H. E., Hopkins

**Saluda County**

## Tuition—

Bouknight, L. S., Batesburg  
Coleman, H. V., Silverstreet  
Smith, T. W., Saluda

## Free Tuition—

Bonnett, G. W., Monetta  
Coleman, J. M., Silverstreet  
Herlong, J. R., Ward  
Padgett, H. W., Ward  
Watson, J. R., Batesburg

## Scholarship—

Goff, H. B., Leesville  
Grice, H. S., Ward

**Spartanburg County**

## Tuition—

Bagwell, W. W., Glendale  
Berry, L. E., Moore  
Berry, W. J., Welford  
Ballenger, R. G., Welford  
Coan, J. A., Welford  
Carson, J. W., Spartanburg  
Chapman, H. T., Inman  
Darden, J. B., Spartanburg  
Dunbar, L. D., Spartanburg  
Frey, W. H., Fairforest



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND SCHOLARSHIPS—(Continued)

Gaston, L. D., Reidville  
 Gault, H. S., Glendale  
 Green, C. D., Spartanburg  
 Gray, G. S., Woodruff  
 Hanna, J. L., Woodruff  
 Hutchins, W. C., Spartanburg  
 Hutchins, G. S., Spartanburg  
 Hughston, T. L., Spartanburg  
 Hudson, G. E., Spartanburg  
 Hendrix, T. J., Duncan  
 Johnson, J. B., Arcida  
 Lambricht, F. L., Landrum  
 Lee, R. L., Landrum  
 McGlone, T. F., Jr., Spartanburg  
 Moore, J. T., Inman  
 Mimes, J. Z., Spartanburg  
 Maxwell, J. A., Spartanburg  
 Pickens, R. O., Spartanburg  
 Ross, T. M., Spartanburg  
 Stallings, W. K., Spartanburg  
 Sanders, M. K., Hagood  
 Sanders, M. H., Hagood  
 Thomas, B. K., Landrum  
 Trogdon, R. B., Spartanburg  
 Traylor, T. L., Spartanburg

## Free Tuition—

Bennett, W. E., Welford  
 Beason, G. H., Woodruff  
 Bishop, W. A., Wodruff  
 Cannon, E. A., Clifton  
 Carver, J. J., Fairforest  
 Cox, G. W., Greer  
 Daniel, T. W., Spartanburg  
 Drake, J. T., Spartanburg  
 Foster, R. M., Spartanburg  
 Groves, G. S., Spartanburg  
 Harmon, Thomas, Spartanburg  
 Harrison, W. S., Moore  
 Jones, J. G., Crescent  
 Morgan, B. W., Welford  
 Skinner, T. B., Spartanburg  
 Trimmier, L. G., Spartanburg  
 Turpin, W. B., Gramling  
 Wright, J. S., Switzer  
 West, Walter

## Scholarship—

Cash, D. H., Chesnee  
 Martin, W. T., Chesnee  
 Phifer, G. E., Spartanburg

Steadman,—Inman  
 Shore, F. W., Greer  
 Trent, R. L., Clifton  
 Thomason, W. E., Woodruff  
 Watson, S. P., Enoree

## Sumter County

## Tuition—

Brogdon, W. J., Sumter  
 Brunner, H. P., Sumter  
 Brown, W. A., Sumter  
 Cuttino, B. H., Sumter  
 Chandler, L. D., Sumter  
 Dick, G. W., Sumter  
 Friar, E. M., Sumter  
 Green, C. H., Sumter  
 Harvin, O. D., Pinewood  
 King, J. A., Sumter  
 Parler, M. L., Wedgefield  
 Tozier, L. R., Sumter  
 Whilden, J. E., Sumter  
 Whildren, C. N., Sumter

## Free Tuition—

Buck, F. E., Sumter  
 Bonner, T. A., Trough  
 Blackwell, J. D., Mayesville  
 Bobo, N., Woodruff  
 Brice, R. W., Wedgefield  
 Chandler, J. W., Sumter  
 Cunningham, J. W., Sumter  
 Davis, J. A., Sumter  
 Cunningham, D. W., Sumter  
 Dickson, R. C., Sumter  
 Foxworth, F. H., Mayesville  
 Felder, J. C., Sumter  
 Moore, A. R., Wedgefield  
 Moore, B. R., Wedgefield  
 McGrew, C. J., Sumter  
 Nettles, E. W., Wedgefield  
 Sholar, J. O., Sumter

## Scholarship—

Geddings, E. N., Sumter  
 Haynsworth, C. R., Sumter  
 Kennedy, E. C., Sumter  
 Moore, S. F., Dalzell  
 Thomas, H. L., Mayesville  
 Wells, S. F., Sumter



CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF  
TUITION AND SCHOLARSHIPS—(Continued)**Union County**

## Tuition—

Askew, H. B., Union  
 Bradley, D. W., Union  
 Cudd, J. E., Jonesville  
 Calvert, J. P., Jonesville  
 Gibson, D. A., Union  
 Haas, H. V., Union  
 Jordan, A. F., Union  
 Stutts, R. T., Union  
 Littlejohn, J. E., Jonesville  
 Murrah, E. S., Union  
 Sams, R. O., Jonesville  
 Scott, J. T., Jr., Jonesville  
 Truluck, R. N., Union

## Free tuition—

Warr, E. L., Jonesville

## Scholarship—

Clark, D. C., Union  
 Douglas, W. J., Jonesville  
 Henry, W. T., Sedalia

**Williamsburg County**

## Tuition—

Brunner, W. C., Lanes  
 Oliver, E. F., Greelyville  
 Meshoe, F., Greelyville  
 McCutchen, J. C., Nesmith  
 McFadden, J. L., Codes

## Free Tuition—

Blackwell, T. J., Salters Depot  
 Kerton, M. B., Cades  
 Lessene, F. F., Greelyville  
 Mosley, J. H., Salters Depot  
 McCullough, S. H., Kingstree  
 Obryan, E. C., Heineman

## Scholarship—

Daniel, D. M., Cooper  
 Herington, R. C., Greelyville  
 Thomas, L. O., Cades

**York County**

## Tuition—

Brown, T. P., Fort Mill  
 Clinton, T. F., Edgemore  
 Fennell, J. R., Rock Hill  
 Faires, C. D., Rock Hill  
 Garrison, H. P., Fort Mill  
 Long, E. M., Rock Hill  
 Love, J. D., McConnellsville

McDowel, H. E., Rock Hill  
 Porter, J. O., Rock Hill  
 Pursley, L. H., York  
 Perceval, S. M., Rock Hill  
 Stevenson, J. A., Sharon  
 Steel, W. E., Fort Mill  
 White, W. B., Rock Hill  
 Williams, H. T., Bowling Green  
 Wray, J. Q., York  
 White, L. M., Rock Hill  
 Williams, W. L., Rock Hill  
 Young, L. R., Rock Hill  
 Youngblood, J. M., Rock Hill  
 Youngblood, W. L., Sharon

## Free Tuition—

Bennett, C. C., Fort Mill  
 Barron, W. H., York  
 Crook, M. D., Fort Mill  
 Chappell, J. W., Rock Hill  
 Dozier, J. P., York  
 Dunlap, G. H., Smith's P. O.  
 Dorsett, R. R., York  
 Dorsett, F. N., York  
 Fewell, J. A., Rock Hill  
 Gibson, J. T., Fort Mill  
 Hope, R. H., Rock Hill  
 Hughes, W. T., Rock Hill  
 Kirk, E. S., Rock Hill  
 Kirk, J. A., Rock Hill  
 Miller, J. R., York  
 Miller, O. L., Rock Hill  
 Miller, T. C., York  
 Potts, P. O., Fort Mill  
 Ragin, J. J., Rock Hill  
 Patterson, L. H., Rock Hill  
 Robinson, O. S., York  
 Sharp, G. N., Leslie  
 Sharp, J. M., Leslie  
 Taylor, J. M., Rock Hill  
 Wylie, A. P., Rock Hill

## Scholarship—

Burns, J. F., York  
 Cain, R. H., Sharon  
 Carroll, G. H., York  
 Latham, C. G., York  
 Link, A. C., Fort Mill



# CLASSIFICATION OF STUDENTS AS REGARDS PAYMENT OF TUITION AND HOLDING OF SCHOLARSHIPS.

## Non-Residents

Adams, J. W., Jamerson, Ala.  
 Adams, A. B., Ashburn, Ga.  
 Alexander, D. O., Nashville, Tenn.  
 Anderson, C. W., Greensboro, N. C.  
 Benson, N. O., Albany, Ga.  
 Bickley, B. L., Grant Falls, N. C.  
 Booker, L. R., Charlotte, N. C.  
 Blont, T. C., Charlotte, N. C.  
 Bomar, J. T., Portsmouth, Va.  
 Bush, F. W., Augusta, Ga.  
 Bullford, W. D., Albany, Ga.  
 Causey, L. G., Chadburn, N. C.  
 Colbert, F. H., Ardmore, Okla.  
 Cutino, D. S. Jr., Newman, Ga.  
 Currence, R. C., Gastonia, N. C.  
 Diaz, O., Boston, Mass.  
 Davis, R. R., Tocoa, Ga.  
 Dicks, L. R., Lakeland, Fla.  
 Ellzey, M. A., Clyo, Ga.  
 Eargle, D. R., Augusta, Ga.  
 Farror, M. B., Augusta, Ga.  
 Foulter, Bruce, Stanford, Texas.  
 Finch, M. C., Rocky Munt, N. C.  
 Freeland, B. W., Croulie, La.  
 Harkey, R. A., Charlotte, N. C.  
 Hart, G. W., Charlotte, N. C.  
 Hendee, M. H., Augusta, Ga.  
 Horn, R. A., Tolassee, Ala.  
 Horn, M. D., Tolassee, Ala.  
 Hicks, J. O., Lexington, N. C.  
 James, S. H., Waycross, Ga.  
 Jeffcoat, W. A., Bluefield, W. Va.  
 Kehew, C. L., St. Petersburg, Fla.  
 King, J. E., Rocky Mount, N. C.  
 Kinard, J. V., Atlanta, Ga.  
 Klugh, G. F., Atlanta, Ga.  
 Johnson, C. S., Terra Haute, Ind.  
 LaBoone, F. R., St. Petersburg, Fla.  
 Longley, J. M., LaGrange, Ga.  
 Mohan, R. A., Rydal, Ga.  
 Mott, W. K., Yazoo City, Miss.  
 Maxwell, W. C., Rydal, Ga.

Mealing, J. P. Jr., Augusta, Ga.  
 Midkiff, R. B., Alexander, Va.  
 Moore, J. L., LaGrange, Ga.  
 Miller, P. L., Hickory, N. C.  
 Mitchell, T. J., Albany, Ga.  
 Moore, L. B., Albany, Ga.  
 McCalla, J. W., Headmonth, Ga.  
 Norton, E. L., Gibson, N. C.  
 Park, W. C., Augusta, Ga.  
 Parkhurst, E. W., Bristol, Conn.  
 Pickens, M. W., Salisbury, N. C.  
 Reese, H. F., St. Petersburg, Fla.  
 Robinson, H. B., LaGrange, Ga.  
 Salley, E. M., Saluda, N. C.  
 Sanftlehin, D. A., Jamica, B. W. I.  
 Schafer, W. B., Toccoa, Ga.  
 Spencer, E. P., McFarlon, N. C.  
 Springer, E. F. W., Scotia, N. Y.  
 Smith, F. V. H., Charlotte, N. C.  
 Smith, M. G., Atlanta, Ga.  
 Smythe, J. A., Hendersonville, N. C.  
 Stribling, R. M., Waynesworth, Ga.  
 Tolbert, E. H., Sacranac Lake N. Y.  
 Tyler, E. G., Broxton, Ga.  
 Verdery, C. B., Augusta, Ga.  
 Eadie, M. D., Brunswick, Ga.  
 Thompson, Z. V., Hendersonville, N. C.  
 Watson, T. C., Charlotte, N. C.  
 Wilson, W. W., Russelville, Ark.  
 Warren, J. A., East Orange, N. J.  
 White, P. L., Augusta, Ga.  
 Wilson, J. U., Villa Rica, Ga.  
 Whaly, E. W., Knoxville, Tenn.  
 Williamson, J. G., Taber, N. C.  
 Young, D. T. Jr., Anniston, Ala.  
 Zagora, O. F., Charlotte, N. C.  
 Scholfield, J. A., Chattonooga, Tenn.  
 Lake, J. C., Wake Forest, N. C.  
 Tuttle, R. H., Lenoir, N. C.  
 McLanahan, J. P., Elberton, Ga.



# REPORT OF S. W. EVANS, SECRETARY-TREASURER OF THE CLEMSON AGRICULTURAL COLLEGE

TO THE FINANCE COMMITTEE OF THE BOARD OF TRUSTEES.  
(Through Mr. S. B. Earle, Acting President)

Gentlemen:

I have the honor of transmitting herewith my annual Report of the Financial affairs of The Clemson Agricultural College of South Carolina for the fiscal year ending June 30, 1925.

Respectfully submitted,  
S. W. EVANS, Secretary-Treasurer.

## RESOURCES

DR.

### Income:

Balance on hand July 1, 1924.....		\$124,079.55
Privilege Fertilizer Tax .....	\$217,100.00	
Morrill and Nelson Fund.....	25,000.00	
Interest on landscrip .....	5,754.00	
Interest on Clemson Bequest.....	3,512.36	
Tuition from Students.....	14,625.00	
Rents .....	13,606.17	
Matriculation and Laboratory Fees.....	5,432.82	
Interest and Misc. Receipts.....	7,915.56	\$292,945.91

### From Other Sources—

Part Appropriations for College Instruction—		
July 1 to Dec. 31, 1924 .....	\$ 30,790.75	
January 1 to June 30, 1925.....	53,346.40	\$ 84,137.15
Total .....		\$501,162.61

## EXPENDITURES

CR.

Scholarships and Advertisements .....	\$ 14,873.35	
Fertilizer Inspection and Analysis .....	30,616.96	\$ 45,490.31

### College Operating Expenses:

Salaries .....	\$181,254.16	
Coal, Labor, Supplies, etc. ....	108,527.24	\$289,781.40
Equipment for Teaching .....	\$ 24,397.82	
Permanent Additions and Improvements.....	30,680.96	\$ 55,078.78
Total .....		\$390,350.49



## SUPPLEMENTARY REPORTS

Reserve on hand June 30, 1925 necessary  
to carry College during Season of small Fer-  
tilizer sales,

July 1st to January 1st ..... \$110,812.12

Total ..... \$501,162.61

The following is a more detailed statement, showing the expenditures and cost of the Public Service Work, and each Department and Division of the College, under the items appropriated by the Board of Trustees:

## PUBLIC STATE WORK DEPARTMENT.

Scholarships and Advertisements .....\$ 14,873.35    \$ 14,873.35

## Fertilizer Inspection and Analysis—

Salaries—Chemists .....	8,781.45	
Chemicals .....	465.17	
Apparatus .....	300.00	
Gasoline .....	295.44	
Record books, postage, etc .....	196.39	
Incidentals .....	7.47	
Labor—Janitor .....	300.00	
Extra help in Lab'y and Office .....	479.99	
Emergency Supplies, Labor, etc. ....	475.95	
Traveling expenses .....	64.39	
Telephone and Telegraph .....	17.85	
Salaries Sect'y and Clerk .....	3,999.96	
Labor-Janitor (Fertilizer Inspection) ..	600.00	
Inspection Tags and Printing .....	5,111.13	
Pay and Travel of Inspectors .....	8,024.36	
Freight, Postage, etc .....	583.77	
Legal Services .....	250.00	
Fertilizer Bulletins .....	663.64	\$ 30,616.96

Public State Work Expenditures ..... \$ 45,490.31

## COLLEGE WORK

## Academic Department

## Economics and Sociology Division—

Periodicals and reference books .....\$ 3.75    \$ 3.75

## English Division—

Stationary, etc. ....	8.50	
Shelves, Stands, etc. ....	39.50	48.00



## History Division—

Periodicals for class room .....	8.00	8.00
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## Office and Unclassified Division—

Janitor (upper floor) .....	423.16	
Chalk, Erasers, brooms, Stat'y, etc. ....	126.10	
Telephone .....	36.00	585.26

## Physics Division—

Laboratory supplies and repairs .....	144.97	
Additional seating .....	321.81	
Physics apparatus .....	349.95	
Shades and lights .....	58.81	
Tables .....	98.59	974.13

## Salaries—

Salaries—Professors and Assistants .....	36,742.94	36,742.94
Department expenditures.....		\$ 38,362.08

## AGRICULTURAL DEPARTMENT

## Agricultural Education Division—

Transportation of Students .....	\$ 284.88	
Printing School leaflets .....	191.85	
Freight and Express .....	2.04	
Supplies .....	99.00	
Communication .....	125.13	
Lantern slides .....	41.67	
Office Equipment .....	147.14	
Laboratory Equipment .....	90.20	
Binding Magazines .....	46.75	
Typewriter and Linotime .....	71.03	\$ 1,099.69

## Agronomy Division—

Labor .....	300.00	
Seeds, score cards, etc. ....	49.98	
Repairs and parts for machine .....	49.99	
Material for class work .....	199.55	
Cement, gasoline, oil, etc.....	150.00	
Small Laboratory Equipment .....	500.00	
Office Equipment .....	50.00	
Equipment, Farm Mach Lab'y .....	850.00	2,149.52



**Animal Husbandry Division—**

Labor .....	1,006.14	
Expenses, Judging contests.....	27.42	
Veterinary service and feed .....	3,850.00	
Miscellaneous supplies .....	99.43	
Registration books .....	47.75	
Farm tools .....	199.74	
Water pipe for lots .....	498.74	
Fencing .....	496.12	
Pasture improvements .....	848.09	
Beef Cattle .....	992.20	
Hog houses, sheds, and gates .....	899.41	
Sheep .....	500.00	
Berkshire boar .....	200.00	
Drain for hog barn .....	50.00	
Poultry husbandry equipment .....	78.16	9,793.20

**Botany and Bacteriology Division—**

Botanical publications .....	37.83	
Glassware and Lab'y supplies .....	400.79	
Repairs and Replacements .....	96.74	
Seats .....	98.40	
Microscopes projection apparatus .....	213.15	
Morphology Equipment .....	99.03	
Physiological Equipment .....	124.68	
Oil immersion objections .....	209.92	
Forestry work on Campus.....	181.25	1,461.79

**College Farm Division—**

Ditching in bottoms .....	600.00	
Repairs .....	200.00	800.00

**Dairy Division**

Freight and Repairs .....	59.57
Foreman—Creamery .....	900.00
Foreman—Dairy Herd (1-3 salary).....	555.49
Labor—Dairy Herd for teaching .....	500.85
Feed and Vet. supplies—Teaching .....	693.55
Educ. supplies, glassware and chemicals.....	301.46
Operating expenses and upkeep .....	128.26
Repairs, Creamery, etc. ....	193.08
Expenses of Inst. to judging contests .....	133.59
Expenses Dairy cattle, State Fair .....	300.00
Barn equipment .....	97.42
Creamery equipment (Teaching) .....	352.45
Equipment Senior Laboratory .....	299.01
Equipment, 10 Stalls .....	594.00



Improvement to grounds .....	48.25	
New fencing .....	505.15	
Pasture Improvements .....	493.53	
Jersey Cattle .....	398.27	
Roof for Silos (C. & R.) .....	642.60	
Medicine chest .....	25.00	
Ten box stalls .....	1,753.29	
Labor, C. B. Henry .....	75.00	9,049.82

**Entomology Division—**

Class and Laboratory materials .....	267.83	
Labor .....	180.00	
Repairs to instruments .....	49.46	
Spray and dusting equipment .....	332.29	
Microscopes .....	249.57	
Office and Lab'y equipment .....	179.79	1,258.94

**Geology and Mineralogy Division—**

Chemical and Lab'y supplies and repairs.....	49.74	
Labor .....	40.30	
Lantern slides .....	25.00	
Maps and Charts .....	36.75	151.79

**Horticultural Division—**

Part salary Greenhouse Foreman .....	660.00	
Part salary Hort. Foreman .....	660.00	
Labor .....	899.96	
Seeds, plants, fertilizer, etc. ....	449.29	
Greenhouse supplies and repairs .....	199.58	
Coal for Greenhouse .....	100.00	
Spray apparatus and material .....	96.88	
Feed and shoeing two mules .....	149.95	
Oil, gas, etc. ....	100.00	
Tools for class use .....	49.12	
Spray apparatus .....	31.85	
Office equipment .....	30.00	
Class room Equipment .....	161.56	3,588.19

**Office and Unclassified Division—**

Janitors and Janitor's supplies .....	1,264.88	
Gasoline .....	93.46	
Attendance on Conventions .....	144.57	
Stationery, postage, etc. for Dept. ....	575.04	
Upkeep of Building .....	148.37	
Telephones .....	253.85	
Filing Cases .....	23.58	2,503.75



**Veterinary Science Division—**

Janitor and Extra Labor .....	520.08	
Veterinary Journals .....	4.00	
Laboratory supplies for class .....	82.36	606.44

**Salaries—**

Salaries Professors and Assistants .....	40,280.77	40,280.77
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Department Expenditures .....		<u>\$ 72,743.90</u>
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**CHEMISTRY DEPARTMENT****Chemistry Division—**

Chemical Apparatus .....	\$ 600.00	
Chemical Supplies .....	700.00	
Gasoline .....	276.87	
Books, Journals and Binding .....	181.65	
Repairs to Apparatus .....	52.32	
Incidentals .....	131.71	
Labor, Janitors and Office Help .....	660.00	
Repairs to Plumbing .....	397.19	
Telephone .....	24.90	
Chemical Apparatus .....	589.94	
Student Apparatus Lockers .....	150.00	
Fitting up class room .....	315.48	
Partitions and shelving .....	55.13	
Kyepdhal Durion Apparatus .....	557.21	4,692.40

**Salaries—**

Salaries Professors and Assistants.....	9,999.88	9,999.88
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Department Expenditures .....		<u>\$ 14,692.28</u>
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**ENGINEERING DEPARTMENT****Civil Engineering Division**

Class materials .....	\$ 196.49	
Repairs and Replacements .....	249.93	
Building Lockers and Tables .....	87.20	
Material and labor for con'st equipment.....	100.00	
Miscellaneous laboratory equipment .....	100.00	
Electric Ovens .....	254.53	
Compression Blocks .....	80.00	
Desk and Chair .....	73.15	
Scales and Small apparatus .....	50.00	\$ 1,191.30



**Drawing Division—**

Materials, ink, paper, etc. ....	19.88	
Repairs and Renewals of Apparatus .....	68.77	
Expenses Architectural Contest .....	25.22	
Subscriptions to Architectural Magazines.....	53.50	
Student Help .....	48.04	
Drafting Stool and Table .....	125.00	
Locks and Lockers .....	40.00	
Architectural Reference Books .....	107.74	
Plaster Casts .....	25.00	513.15

**Electrical Engineering—**

Laboratory Supplies .....	190.90	
Repairs and Renewals .....	150.00	
Class and laboratory notes for students.....	29.75	
Student Assistance .....	139.65	
Periodicals and Reference Books .....	38.04	
Telephone .....	39.90	
Watermeter and Transformers .....	542.00	
Motor .....	322.00	
Switchboard .....	157.00	
Shelves and tables .....	95.86	
Ammeters, voltmeters .....	185.00	
Rheostats, potentiometer, condenser .....	250.00	
Resistance boxes .....	75.00	
Freight on machinery .....	79.67	2,213.77

**Forge and Foundry Division—**

Labor .....	1,695.00	
Repairs and Replacements.....	74.69	
Forge shop supplies, iron, steel, etc.....	296.58	
Coal for Forge Shop .....	375.00	
Foundry supplies, as plumbago, etc.....	49.72	
Moulding sand .....	57.00	
Coke for Foundry .....	65.00	
Anvils .....	120.00	
Pig iron and brass for foundry .....	150.00	2,882.99

**Machine Shop Division—**

Labor—Machinist .....	1,000.01	
Repairs and Replacements .....	201.12	
Shop materials .....	399.68	
Frt. on Milling Mach. (Highway Dept.) .....	51.45	
Com. Milling attachment .....	233.32	
Spiral Milling attachment .....	289.60	
Opening Disc .....	88.58	2,263.76



**Mechanical Engineering—**

Laboratory Supplies .....	120.58	
Repairs and Replacements .....	47.00	
Pyrometer .....	200.00	
Desk .....	30.00	
Stools .....	100.00	
Weirs .....	75.00	
Semi Diesel Engine .....	600.00	
Small Laboratory apparatus .....	387.98	
Dynamometer .....	400.00	
Voltmeter .....	46.09	2,006.65

**Office and Unclassified Division—**

Labor, Janitoring building .....	575.00	
Office and Janitors Supplies .....	209.85	
Upkeep of Building .....	45.97	
Attendance on Conventions .....	80.77	
Incidentals .....	2.77	
Telephone .....	36.00	950.36

**Wood Shop Division—**

Labor—Machinist .....	449.75	
Supplies as lumber, hdw. paint, etc. ....	520.81	
Repairs and Replacements of tools and Mach	295.03	1,265.59

**Salaries—**

Salaries, Professors and Assistants.....	37,274.50	37,274.50
Department Expenditures .....		\$ 50,562.07

**MILITARY DEPARTMENT****Office and Unclassified—**

Postage, Stationery, Record books .....	\$ 486.53	
Military Supplies .....	166.73	
Upkeep of band .....	100.00	
Officers Sabers .....	198.40	
Losses of Federal Property .....	71.44	
Cadet Officers Insignia .....	317.25	
Telephone .....	48.40	
Band Instruments .....	142.11	
Target Range .....	99.96	
Class room Equipment .....	55.90	
Office Equipment .....	100.00	\$ 1,786.72

**Salaries—**

Salaries—Commandant and Assistants.....		5,022.49
Department Expenditures .....		\$ 6,809.21



**TEXTILE DEPARTMENT****Carding and Spinning Division—**

Cotton for Class use .....	\$	471.89	
Repairs and Supplies .....		218.96	
Materials for cotton grading .....		100.00	
Twist Counters .....		75.00	
Two Spinning Frames .....		448.65	\$ 1,314.50

**Dyeing Division—**

Chemicals and Dye Stuff .....		237.64	
Class room and Laboratory materials .....		247.75	
Misc. Small Lab'y apparatus .....		139.71	625.10

**Office and Unclassified Division—**

Janitor and Engineer .....		1,132.10	
Gasoline .....		75.04	
Stationery, Postage, etc. ....		95.04	
Student Labor .....		84.40	
Mill boy Helper .....		394.90	
Textile periodicals .....		11.98	
Freight on donated machinery .....		250.26	
Telephone .....		35.75	
Typewriter .....		50.00	
Pulleys, bolts and installation .....		189.13	2,318.60

**Weaving and Designing Division—**

Warp and Filling Yarn .....		698.67	
Loom Supplies and Repairs .....		234.53	
Yarns for new fancy looms .....		354.72	
Hand Knitting Machines .....		155.41	1,443.33

**Salaries—**

Salaries Professors and Assistants .....		13,726.44	
Department Expenditures .....		\$ 19,427.97	

**PUBLIC UTILITIES DEPARTMENT****Campus Division—**

Part Salary Campus Foreman .....	\$	660.00	
Labor for Campus .....		1,999.11	
Fertilizers .....		500.00	
Seeds, plants, and trees.....		650.00	
Feed and upkeep of mules .....		549.23	
Tools, machinery and repairs .....		179.50	
Cement walks .....		413.94	



Storm weather drainage .....	488.14	
Development Exp. Station Road .....	299.95	
Development Chapel area, Bar. I, Y, etc.....	1,399.66	
Development other Lawns .....	500.00	
Mower and hand mowers .....	174.92	
Developing Cemetery .....	731.81	\$ 8,546.26

**Construction and Repairs Division—**

Office supplies, postage, files, etc. ....	50.83
Repairs and Renewals of Apparatus .....	25.00
Tools and Implements .....	50.00
Gasoline and Tires for Truck .....	383.44
Misc. unforeseen repairs to Public Bldg.....	1,416.00
Stack of lumber .....	535.70
Telephone .....	66.00
Repairs to Public Buildings (Ex "A").....	8,025.77
Repairs to Residences (Ex "B").....	6,227.52
Moving servant house .....	318.45
Steel beams in place of wood in Mess Hall .....	688.92
Roof over rear porch (Hospital) .....	179.93
Two toilets in C. & R. Division .....	181.61
Dry room (C. & R. Div.) .....	105.43
Completion C. & R. Shop .....	299.23
Moving Garage .....	24.20
Screen windows (Vet. Hospital) .....	23.72
Room 3rd. floor, Eng. Bldg .....	299.69
Partition, Mach. Lab'y .....	125.49
Completing room, Elec. Lab'y .....	299.90
Radiators in office Agr. Hall .....	40.42
Drain from Barn .....	170.80
Heating and lighting Chapel and Phys. room .....	1,500.00
Seating in Chapel .....	8,554.91
Completing Chapel .....	8,507.24
Curtain and Scenery for Chapel .....	1,039.69
Memorial tablet Dr. Riggs .....	302.50
Memorial tablet Prof. Sease .....	75.00
Memorial tablet Dr. Redfern .....	75.00
Cement steps and walks, Bar. I .....	1,128.00
Vestibule, front and rear, (Hospital) .....	38.40
Bal. from Bks. I toilet on No. II .....	867.34
Ceiling servant house, Long .....	45.30
Ceiling servant house, Bradley .....	109.00
Doors and windows. (Holmes) .....	74.29
Latticing, (Horton) .....	43.77
Closets (Mell House) .....	74.23



Pair doors (Earle) .....	77.23	
Latticing under house (Earle) .....	29.07	
Close up under house (Goodman) .....	75.77	
Two doors (Littlejohn) .....	41.08	
Partition rear porch (Littlejohn) .....	40.91	
Salary Supt. (Hewer) .....	1,800.00	44,036.78

**Heat, Light and Water Division—**

Labor .....	6,900.10	
Supplies .....	1,899.45	
Coal .....	14,091.46	
Repairs .....	739.19	
Telephone .....	42.00	
Developing grounds, Pumping Station .....	451.11	
Fire hose .....	300.00	
Steam pump .....	250.00	
Plumbing for residences .....	141.47	24,814.78

**Radio System Division—**

Radio Operator and Supplies .....	500.00	500.00
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**Roads, Sidewalks and Hauling Division—**

Labor, truck drivers, etc. ....	2,362.05	
Hire of teams from farm .....	200.00	
Gasoline, oil, tires, etc. ....	1,255.06	
Top soiling roads .....	570.25	
Salary Supt. (Lewis) .....	1,500.00	5,887.36

**Watchman Division—**

Salary of night-watchman and police .....	910.00	
Watchman supplies .....	37.01	
Special police service (if needed) .....	142.00	1,089.01

Department Expenditures .....		<u>\$ 84,874.19</u>
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**MISCELLANEOUS DEPARTMENT****Library Division—**

Salaries .....	\$ 3,875.00
Magazines .....	249.85
Binding Magazines and Periodicals .....	199.79
Supplies as cards, stationery, etc. ....	100.00
Membership dues to societies .....	60.00
Telephone .....	36.00
Books .....	499.10



## SUPPLEMENTARY REPORTS

Supplies (Reference Library) .....	100.00	
Binding (Reference Library) .....	196.70	
Periodicals (Reference Library) .....	149.48	
Books (Reference) .....	407.90	
Library Equipment (Reference Library) ....	730.33	\$ 6,604.15

**Miscellaneous Items Division—**

Expenses of Trustees and Bd. of Visitors ...	1,119.07	
Insurance .....	5,335.51	
Contingent and Incidental Equipment .....	2,453.22	
Ministers .....	1,694.40	
Y. M. C. A. Secretary .....	500.00	
College Catalogue .....	800.00	
Annual report to Legislators .....	42.00	
Commencement Expenses .....	301.37	
Trustee medals .....	30.30	
Membership of College in Nat. Assoc. ....	124.00	
Examination booklets .....	241.80	
Pension of J. B. S. ....	300.00	
Scavenger services .....	495.00	
Gasoline and repairs, College Ford .....	199.84	
State Fair Exhibits (College Work) .....	375.66	
Travel and Entertainment Leg. Committee ..	631.88	
Popular Bulletins .....	79.91	
Summer School .....	5,052.00	
Tablet L. I. McHugh .....	25.00	
Salary—Magistrate .....	99.96	
Concrete Mixer .....	500.00	
Improvements to Riggs Res. and Premises ..	618.00	21,018.92

**Presidents Office Division—**

Student cards, forms, etc. ....	681.34	
Stamps, stationery, supplies, etc. ....	988.09	
Traveling Fund .....	617.45	
Janitor and Janitors supplies for Col. Bld ..	605.32	
Telephone rental, three phones .....	108.00	
Telegrams and long distant calls .....	200.60	
Salaries .....	16,904.76	20,105.56

**Treasurer's Office Division—**

Record forms, supplies, etc. ....	1,375.00
Clerical assistance .....	840.00
Bond of Treasurer and two assistants .....	125.00



Telephone .....	35.35	
Salaries .....	6,595.52	
Audit of books .....	688.98	9,659.85
		<hr/>
Department Expenditures .....		\$ 57,388.48
		<hr/>

**RECAPITULATION**

Public State Work .....	\$ 45,490.31	
Academic Department .....	38,362.08	
Agricultural Department .....	72,743.90	
Chemical Department .....	14,692.28	
Engineering Department .....	50,562.07	
Military Department .....	6,809.21	
Textile Department .....	19,427.97	
Public Utilities .....	84,874.19	
Miscellaneous Department .....	57,388.48	\$390,350.49
		<hr/>

**CADET FUND****Miscellaneous Division****Receipts—**

Balance on hand July 1st. 1924 .....	\$ 18,432.80
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**Expenditures—**

Materials, etc .....	\$ 132.87	
Labor—Carpentering, etc. ....	261.14	
Supplies .....	766.34	
Equipment .....	6,993.80	
Legal services .....	35.00	8,189.15
		<hr/>

Balance June 30, 1925 .....	10,243.65
	\$ 18,432.80

**Breakage****Receipts—**

Cash received from students .....	\$ 3,393.61
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**Expenditures—**

Labor .....	1,086.71
Materials .....	617.49
Freight .....	5.89
Hymnals .....	100.00
Supplies .....	685.34



## SUPPLEMENTARY REPORTS

Household Equipment .....	844.18	
Refunds to students .....	54.00	3,393.61
		<hr/>

**Heat, Light and Water****Receipts—**

Cash received from students .....		\$ 16,367.90
		<hr/>

**Expenditures—**

Labor .....	3,513.90	
Materials .....	565.29	
Coal .....	10,775.04	
Supplies .....	790.09	
Repairs .....	260.97	
Refunds to students .....	427.74	16,333.03
	<hr/>	

Balance—June 30, 1925 .....		34.87
		<hr/>

**\$ 16,367.90**

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**Hospital****Receipts—**

Cash received from students .....		9,878.92
		<hr/>

**Expenditures—**

Salaries .....	3,666.66	
Labor .....	2,837.97	
Telephone and Telegrams .....	66.25	
Freight and Express .....	8.51	
Food Supplies .....	1,099.31	
Laundry, etc. ....	351.66	
Coal .....	369.51	
Refrigerating supplies .....	139.10	
Medical and Surgical supplies .....	375.83	
Refunds to students .....	179.17	
Miscellaneous Supplies .....	233.82	
Membership dues .....	10.00	
Household Equipment .....	227.77	
Traveling Expenses .....	100.00	9,565.56
	<hr/>	

Balance—June 30, 1925 .....		313.36
		<hr/>

**\$ 9,878.92**

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# CLEMSON AGRICULTURAL COLLEGE

77

## Incidentals

### Receipts—

Cash received from students .....	8,905.84
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### Expenditures—

Salary—Quartermaster .....	687.50	
Labor .....	3,231.60	
Freight and Express .....	62.34	
Cleaning and Disinfectant .....	331.72	
Miscellaneous Supplies .....	1,492.65	
Telephone service .....	36.00	
Office Supplies .....	14.00	
Refunds to students .....	65.50	
Household Equipment, chairs, etc. ....	3,936.24	
Over-draft June 30, 1925 .....		951.71
	<u>\$ 9,857.55</u>	<u>\$ 9,857.55</u>

## Laundry

### Receipts—

Cash received from students .....	14,702.17
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### Expenditures—

Salaries .....	249.96	
Labor .....	9,238.78	
Freight and Express, Tel. and Teleg. ....	120.07	
Miscellaneous printed forms .....	150.25	
Coal .....	499.50	
Laundry Supplies .....	2,052.16	
Clothing and Drygoods .....	45.35	
Miscellaneous Supplies .....	92.89	
Equipment .....	663.62	
Refunds to students .....	262.41	13,374.99

Balance—June 30, 1925 .....	1,327.18
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14,702.17

## Subsistence

Cash received from students .....	161,503.88
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### Expenditures—

Salaries .....	3,749.92
Labor .....	20,735.78
Groceries .....	132,956.62
Coal .....	644.17
Miscellaneous Supplies .....	2,798.16



**Incidentals****Receipts—**

Cash received from students .....	8,905.84
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**Expenditures—**

Salary—Quartermaster .....	687.50	
Labor .....	3,231.60	
Freight and Express .....	62.34	
Cleaning and Disinfectant .....	331.72	
Miscellaneous Supplies .....	1,492.65	
Telephone service .....	36.00	
Office Supplies .....	14.00	
Refunds to students .....	65.50	
Household Equipment, chairs, etc. ....	3,936.24	
Over-draft June 30, 1925 .....		951.71
	<u>\$ 9,857.55</u>	<u>\$ 9,857.55</u>

**Laundry****Receipts—**

Cash received from students .....	14,702.17
-----------------------------------	-----------

**Expenditures—**

Salaries .....	249.96	
Labor .....	9,238.78	
Freight and Express, Tel. and Teleg. ....	120.07	
Miscellaneous printed forms .....	150.25	
Coal .....	499.50	
Laundry Supplies .....	2,052.16	
Clothing and Drygoods .....	45.35	
Miscellaneous Supplies .....	92.89	
Equipment .....	663.62	
Refunds to students .....	262.41	13,374.99

Balance—June 30, 1925 .....	1,327.18
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<u>14,702.17</u>
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**Subsistence**

Cash received from students .....	161,503.88
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**Expenditures—**

Salaries .....	3,749.92
Labor .....	20,735.78
Groceries .....	132,956.62
Coal .....	644.17
Miscellaneous Supplies .....	2,798.16



## SUPPLEMENTARY REPORTS

Refunds to students .....	2,155.14	
Equipment .....	3,213.59	
Over-draft .....		4,749.50
	<u>166,253.38</u>	<u>166,253.38</u>

**Uniforms****Receipts—**

Cash received from Students.....		54,491.06
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**Expenditures—**

Uniform Garments .....	54,135.26	
Refunds to Students .....	1,298.31	
Over-draft June 30, 1925 .....		942.51
	<u>55,433.57</u>	<u>55,433.57</u>

**RECAPITULATION CADET FUND**

Item	Receipts	Expenditures	Balance	Deficit
Subsistence .....	\$161,503.88	\$166,253.38	\$	\$ 4,749.50
Uniforms .....	\$ 54,491.06	\$ 55,433.57	\$	\$ 942.51
Laundry .....	\$ 14,702.17	\$ 13,374.99	\$ 1,327.18	
H. L. and W. ....	\$ 16,367.90	\$ 16,333.03	\$ 34.87	
Hospital .....	\$ 9,878.92	\$ 9,565.56	\$ 313.36	
Incidentals .....	\$ 8,905.84	\$ 9,857.55	\$	\$ 951.71
Breakage .....	\$ 3,393.61	\$ 3,393.61		
	<u>\$269,243.38</u>	<u>\$274,211.69</u>	<u>\$ 1,675.41</u>	<u>\$ 6,643.72</u>
Net overdraft .....				\$ 4,968.31
Old Balance .....	\$ 18,432.80			
Less Expenditures	8,189.15			
	<u>\$10,243.65</u>			

Bal. carried Fd. \$ 5,275.34

\$279,487.03      \$279,487.03

**STUDENT BANKING ACCOUNT****Receipts—**

Balance on hand July 1, 1925 .....	\$ 1,951.61	
Deposits .....	94,433.82	\$ 96,385.43

**Expenditures—**

Checks paid .....	95,716.92	
Balance June 30, 1925 .....	668.51	96,385.43



## REVOLVING ACCOUNTS

## Coast Station

## Receipts—

Miscellaneous Sales .....		\$ 498.03
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## Expenditures—

Over-draft Brought Fd. ....	\$ 571.75	
Over-draft June 30, 1925 .....		73.72
	<u>571.75</u>	<u>571.75</u>

## Pee Dee Station

## Receipts—

Miscellaneous Sales .....		1,649.36
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## Expenditures—

Over-draft Brought Fd. ....	2,212.38	
Reimbursement for ck. ....	450.00	
Over-draft—June 30, 1925 .....		1,013.02
	<u>2,662.38</u>	<u>2,662.38</u>

## Veterinary Hospital

## Receipts—

Miscellaneous sales .....		233.25
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## Expenditures—

Labor—Janitoring .....	70.00	
Feed and Veterinary Supplies .....	149.20	
	<u>219.20</u>	
Balance June 30, 1925 .....	14.05	233.25

## Hog Cholera Serum Work

## Receipts—

Balance brought forward .....		12,807.38
Miscellaneous Sales .....		19,319.92
		<u>32,127.30</u>

## Expenditures—

Salaries—Clerks .....	3,000.00	
Feed and Veterinary Supplies .....	16,916.76	
	<u>19,916.76</u>	
Balance June 30, 1925 .....	12,210.54	32,127.30



**Nursery Inspection Tags****Receipts—**

Cash brought Fd. ....	357.85	
Sale of Tags .....	1,355.91	
		<u>1,713.76</u>

**Expenditures—**

Freight and Express .....	15.85	
Supplies (Tags) .....	1,443.21	
	<u>1,459.06</u>	
Balance June 30, 1925 .....	254.70	<u>1,713.76</u>

**Manufacturing of State Flags****Receipts—**

Sale of Flags .....	34.70
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**Expenditures—**

Over-draft brought Fd. ....	222.65	
Flags .....	11.09	
Over-draft June 30, 1925 .....		199.04
	<u>233.74</u>	<u>233.74</u>

**Summer School****Receipts—**

Balance brought Fd. ....	8,403.04	
Cash receipts .....	6,281.00	14,684.04

**Expenditures—**

Salaries—Instructors .....	5,215.00	
Labor .....	2,795.73	
Food Supplies .....	7,261.97	
Traveling Expenses .....	9.50	
Office Supplies .....	29.75	
Refunds .....	35.00	
Freight and Express .....	21.84	
Other Supplies .....	129.00	
Binders .....	96.02	
Over-draft June 30, 1925 .....		909.77
	<u>15,593.81</u>	<u>15,593.81</u>



**Athletic Association****Receipts—**

Balance brought Fd. from previous year .....	1,936.50	
Cash receipts .....	35,753.89	37,690.39

**Expenditures—**

Salaries—Coach and Assistants .....	9,890.70	
Labor .....	314.46	
Officials and Umpires .....	1,139.65	
Guarantees and Expenses, etc. of teams .....	13,565.60	
Rain Insurance .....	750.76	
Supplies .....	5,780.26	
Medical Fees .....	309.35	
Freight and Express .....	8.49	
Tel., Teleg., and Postage .....	133.07	
Lyceum Entertainments .....	950.00	
Bleachers, Fencing, etc. ....	4,640.00	
Student Publications, postage, etc. ....	2,185.30	
Apportionment to Y. M. C. A. ....	2,139.73	
Refunds to students .....	78.00	
Asso. dues .....	32.50	
Over-draft June 30, 1925 .....		4,227.48
	41,917.87	41,917.87

**Textile Department****Receipts—**

Balance brought Fd. ....	2,750.97	
Cash receipts .....	2,039.55	4,790.52

**Expenditures—**

Freight and Express .....	32.10	
Supplies .....	290.05	
Equipment .....	2,233.43	
Travel .....	97.72	
Repairs .....	55.75	
Telephone tolls .....	1.30	
	2,710.35	
Balance June 30, 1925 .....	2,080.17	4,790.52

**Wood Shop****Receipts—**

Balance brought forward .....	444.86	
Cash Receipts .....	1,058.79	1,503.65



## SUPPLEMENTARY REPORTS

**Expenditures—**

Labor .....	898.95	
Supplies .....	240.28	
	<u>1,139.23</u>	
Balance .....	364.42	<u>1,503.65</u>

**Cadet Exchange****Receipts—**

Sale of books, etc. ....		19,371.57
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**Expenditures—**

Over-draft brought forward .....	25.61	
Salaries .....	499.92	
Labor .....	349.84	
Telephone Services .....	30.15	
Supplies .....	19,473.38	
Over-draft .....		1,007.33
	<u>20,378.90</u>	<u>20,378.90</u>

**Student Medals****Receipts—**

Balance brought Fd. ....		138.54
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**Expenditures—**

Norris Medal .....	50.26	
Balance June 30, 1925 .....	88.28	138.54

**Co-Operative Cotton Testing****Receipts—**

Cash Receipts .....		2,382.77
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**Expenditures—**

Over-draft brought Fd. ....	592.08	
Labor .....	549.23	
Supplies .....	642.05	
Freight, Express, and Telephone .....	73.85	
Equipment .....	72.60	
Rent of machine and power .....	470.00	
	<u>2,399.81</u>	
Over-draft June 30, 1925 .....		17.04
	<u>2,399.81</u>	<u>2,399.81</u>



**Smith-Hughes Work****Receipts—**

Cash Receipts .....		26,020.96
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**Expenditures—**

Over-draft brought Fd. ....	12,873.31	
Salaries—Supervisors and Teachers .....	20,859.99	
Traveling Expenses .....	4,213.16	
Bulletins .....	776.25	
Office Supplies .....	474.74	
Miscellaneous Supplies .....	40.20	
Tel., Teleg., and Postage .....	107.23	
Labor .....	242.08	
Over-draft June 30, 1925 .....		13,566.00
	<hr/>	<hr/>
	39,586.96	39,586.96
	<hr/>	<hr/>

**Insurance Sinking Fund****Receipts—**

Balance brought Fd. ....	10,249.16	
Cash Receipts .....	5,335.51	15,584.67

**Expenditures—**

Insurance Premiums .....	15,556.72	
Labor and materials .....	76.23	
Over-draft June 30, 1925 .....		48.28
	<hr/>	<hr/>
	15,632.95	15,632.95
	<hr/>	<hr/>

**Smith-Lever Interest Fund****Receipts—**

Balance brought forward .....	4,902.14	
Cash from interest on deposits .....	3,721.44	8,623.58

**Expenditures—**

Brought forward .....	640.00	
Freight and express .....	77.15	
Traveling expenses .....	642.84	
Subscriptions to news papers and pub. ....	1,274.04	
Miscellaneous supplies .....	360.50	
Office equipment .....	615.28	
Rent .....	87.50	
Honorarium .....	50.00	
	<hr/>	
	3,747.31	
Balance June 30, 1925 .....	4,876.27	8,623.58
	<hr/>	<hr/>



**Rents****Receipts—**

Rent of residences, etc. ....		14,007.32
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**Expenditures—**

Miscellaneous .....	176.15	
Misc. equipment .....	225.00	
Transfer to college account .....	13,606.17	14,007.32

**Receiving Account****Receipts—**

Interest, light and water sales, etc. ....		15,811.62
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**Expenditures—**

Over-draft brought forward .....	0.56	
Freight and express .....	87.55	
Equipment .....	522.27	
Premiums on Depository Bonds .....	1,400.00	
Misc. supplies .....	142.54	
Refunds to students (fees) .....	17.74	
Transfer to college account .....	13,348.38	
Transfer to new laundry account .....	292.58	15,811.62

**Agricultural Hall Fire Loss****Receipts—**

Insurance collected on building and contents		94,171.39
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Balance June 30, 1925 .....		94,171.39
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**Official Testing****Receipts—**

Cash receipts .....		2,781.43
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**Expenditures—**

Over-draft brought forward .....	166.58	
Pay and travel of inspectors .....	2,918.15	
Over-draft June 30, 1925 .....		303.30
	3,084.73	3,084.73

**Laundry Building****Receipts—**

Transfer from receiving account .....		292.58
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**Expenditures—**

Over-draft brought forward .....	292.58
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**Education of Disabled Souldiers****Receipts—**

Cash receipts .....	4,234.88
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**Expenditures—**

Over-draft brought forward .....	2,424.59
Salaries .....	1,833.32
Over-draft June 30, 1925 .....	23.03

4,257.91	4,257.91
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**RECAPITULATION REVOLVING ACCOUNTS**

Balances brought forward, (all sources) .....	\$ 41,990.44
Receipts for year (all sources) .....	256.355.87

Total .....	298,346.31
-------------	------------

Over-draft brought forward (all sources) ....	19,382.09
Expenditures for year (all sources)	186,292.41

Balance (all sources) .....	205,674.50
	92.671.81

\$298,346.31
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**SMITH-LEVER EXTENSION FUND****Receipts—**

Federal appropriation .....	\$156,014.48
State appropriations (supplemented by by County appropriations (\$35,151.64) .....	146,014.49
	302,028.97

The following amounts are included in this report but handled by Counties and Winthrop College—

County appropriations .....	75,930.49
Winthrop College appropriation .....	7,000.00
	82,930.49

Total all sources .....	\$384,959.46
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**Expenditures—**

Salaries—Director and asst. Dir. ....	6,750.00
Salaries—State supervising agents .....	25,545.52



## SUPPLEMENTARY REPORTS

Salaries—Specialists .....	57,195.88	
Salaries—County agents .....	202,959.29	
Salaries—Stenographers and clerks .....	31,682.52	
Labor .....	669.04	
Supplies and materials .....	6,453.44	
Communication service .....	4,152.11	
Traveling expenses .....	38,142.73	
Freight and express .....	223.75	
Publications .....	6,621.11	
Heat, light and water .....	626.64	
Furniture and fixtures .....		
Office rent for agents .....	976.05	\$384,959.40

**HATCH, ADAMS AND FARM PRODUCTS****Receipts—**

Balance on hand July 1, 1924 (sales) .....	\$ 2,083.33
Receipts from the treasurer of the U. S. as per appropriations for fiscal year ended June 30, 1925—	

Hatch fund .....	\$ 15,000.00	
Adams fund .....	15,000.00	
Sales on farm produce .....	39,368.71	69,368.71
		<u>71,452.04</u>

**Expenditures—**

Salaries .....	18,716.02	
Labor .....	18,805.33	
Publications .....	593.48	
Stationery and office supplies .....	793.10	
Freight and express .....	371.47	
Heat, light, water and power .....	2,085.19	
Scientific supplies .....	427.12	
Sundry supplies .....	4,632.50	
Fertilizers .....	3,970.99	
Tel., teleg., and postage .....	514.74	
Traveling expenses .....	683.12	
Library .....	850.57	
Furniture and fixtures .....	1,150.11	
Scientific equipment .....	412.24	
Live stock .....	1,840.55	
Tools, machinery, etc. ....	2,596.93	
Buildings and land .....	1,470.46	
Feeding Stuffs .....	9,732.91	
	<u>69,646.83</u>	
Balance June 30, 1295 .....	1,805.21	71,452.04



**AGRICULTURAL RESEARCH**

(Reported by college fiscal year, paid through Compt. General's office)

Appropriation July 1, 1924 to June 30, 1925

\$ 48,738.55

Expenditures July 1st., 1924 to June 30, 1925.

Salaries—Scientific staff .....	\$ 13,009.51	
Salary—Asst. to director .....	2,100.02	
Salaries—Chemists .....	1,660.83	
Salaries—Supts. of farm and stations .....	9,249.96	
Salary—Herdsman, dairy and ani. hus. ....	1, 703.30	
Salaries—Foreman, Hort. Div. ....	660.00	
Publications .....	621.61	
Office supplies .....	263.31	
Labor on experiments .....	5,488.72	
Labor—Animal Hus. Div. ....	571.87	
Labor—Dairy Div. ....	1,026.94	
Tools, implements and repairs .....	424.31	
Farm labor, etc. ....	268.21	
Seed and fertilizers .....	3,381.97	
Machinery and equipment .....	908.60	
Live stock .....	600.00	
Feed and veterinary supplies .....	3,077.44	
Motor vehicle supplies .....	150.21	
Miscellaneous supplies .....	31.17	
Office equipment .....	274.25	
Underdrainage and clearing .....	303.93	
Motor vehicle equipment .....	417.84	
Traveling expenses .....	2,544.55	48,738.55

**CO-OPERATIVE BOLL WEEVIL CONTROL**

(Reported by college fiscal year, paid through Compt. General's office)

Appropriation July 1, 1924 to June 30, 1925

\$ 23,043.19

Expenditures July 1, 1924 to June 30, 1925

Salary—Scientific staff .....	\$ 7,938.14
Salary—Stenographer .....	1,100.00
Salary—Temporary assistants .....	2,043.89
Telephone and telegraph .....	116.29
Common labor .....	2,752.08
Traveling expenses .....	1,530.12
Repair parts to machine .....	935.54
Office supplies .....	121.67
Motor vehicle supplies .....	855.01
Seeds and fertilizers .....	456.74
Poison supplies .....	1,146.85



## SUPPLEMENTARY REPORTS

Toilet, sewer disposal .....	1,000.00	
Bulletins .....	739.07	
Scientific equipment .....	1,632.62	
Dusting and spraying machinery .....	675.17	23,043.19
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## CROP PEST AND DISEASES

(Reported by college fiscal year, paid through Compt. General's office)

Appropriation July 1, 1924 to June 30, 1925	\$ 10,759.63
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Expenditures, July 1, 1924 to June 30, 1925

Salaries—Scientific staff .....	\$ 6,778.06	
Clerk and stenographer .....	951.00	
Labor—Poisoning work .....	112.14	
Traveling expenses .....	2,166.11	
Telegraph and telephone .....	125.57	
Office supplies .....	576.75	
Office equipment .....	50.00	10,759.63
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## LIVE STOCK SANITARY WORK

(Reported by college fiscal year, paid through Compt. General's office)

Appropriation July 1, 1924 to June 30, 1925	\$ 68,539.49
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Expenditures, July 1, 1924 to June 30, 1925

Salaries—Veterinarians .....	\$ 24,667.91	
Salaries—Assts. to veterinarians .....	5,905.00	
Cattle inspectors .....	17,491.67	
Deputy state veterinarians fees .....	99.26	
Clerk .....	1,750.00	
Wages, cattle inspector .....	1,312.00	
Traveling expenses .....	10,332.32	
Telegraph and telephone .....	215.27	
Office supplies .....	164.65	
Lab'y and disinfecting supplies .....	1,864.47	
Other supplies .....	1,372.83	
Rent .....	1,087.20	
Payment—Slaughtered dis. live stock .....	2,210.55	
Office equipment .....	39.00	
Miscellaneous equipment .....	27.36	68,539.49
		<hr/>



## RECAPITULATION

## Resources—

Cash on hand July 1, 1924		
College account .....	\$124,079.55	
Cadet fund .....	18,432.80	
Revolving fund .....	22,608.35	
S. C. Experiment Station sales .....	2,083.33	
Students banking account .....	1,951.61	\$169,155.64

## Receipts for Fiscal Year—

College account .....	377,083.06	
Cadet fund .....	269,243.38	
Student banking account .....	94,433.82	
Revolving funds .....	256,355.87	
Smith-Lever Extension Fund (Including \$111,082.13 County and \$7,000.00 Win- throp College Fund not paid by treasurer C. A. C. ....	384,959.46	
S. C. Expt. Stat. Hatch and Adams .....	69,368.71	1,451,444.30

State appropriations (Reported by College  
Fiscal year and paid through Compt. Gen-  
eral's office) .....

Agricultural research .....	48,738.55	
Co-Operative boll weevil control .....	23,043.19	
Crop pests and diseases .....	10,759.63	
Live stock sanitary work .....	68,539.49	151,080.86

Total ..... 1,771,680.80

## Expenditures—

College account .....	390,350.49	
Cadet fund .....	282,400.84	
Student banking account .....	95,716.92	
Revolving fund .....	186,292.41	
Smith-Lever Extension Fund (Including Counties and Winthrop College approp- riations not handled by Treas. C. A. C. ....	384,959.46	
S. C. Experiment Stat. Hatch and Adams ....	69,646.83	1,409,366.95

State appropriations ( Reported by College  
Fiscal Year and paid through Compt.  
General's office)

Agricultural research .....	48,738.55
Co-Operative boll weevil control .....	23,043.19



## SUPPLEMENTARY REPORTS

Crop pests and diseases .....	10,759.63	
Live stock sanitary work .....	68,539.49	151,080.86
		<hr/>
		\$1,560,447.81
Balance on hand all sources June 30, 1925		211,232.99
		<hr/>
		\$1,771,680.80
		<hr/> <hr/>

## DISTRIBUTION OF CASH JUNE 30, 1925

## Interest-bearing deposits—

Bank of Anderson, Anderson, S. C. ....	\$ 10,000.00	
Farmers and Merchants Bank, Anderson, S. C. ....	8,783.55	
National Bank of Sumter, Sumter, S. C. ....	25,000.00	
Farmers Bank, Abbeville, S. C. ....	25,000.00	
Union Savings Bank, Bennettsville, S. C. ...	25,000.00	
Bank of Greenwood, Greenwood, S. C. ....	25,000.00	
Bank of Pendleton, Pendleton, S. C. (Time Deposit) .....	5,000.00	
Carolina National Bank, Anderson, S. C. ....	5,000.00	
National Bank of Newberry, Newberry, S. C.	30,000.00	
Columbia National Bank, Columbia, S. C.	10,000.00	
Norwood National Bank, Greenville, S. C.	10,000.00	
American Bank & Trust Co., Columbia, S. C.	31,171.39	
Central National Bank, Spartanburg, S. C.	5,000.00	
Fort Hill Bank .....	\$43,000.85	
	<hr/>	
	257,955.79	
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## Less-Over-drafts—

Bank of Pendleton (College) \$13,519.91		
Bank of Pendleton (Smith- Lever) .....	372.64	
Fort Hill Bank (Smith-Lever) 2,431.94	\$ 16,324.49	\$241,631.30
	<hr/>	

## Less Checks Out—

General account .....	23,871.40	
Smith-Lever Fund .....	7,195.42	31,066.82
	<hr/>	<hr/>
		31,066.82
		<hr/>
Total bank deposits .....		\$210,564.48
Cash in office .....		668.51
		<hr/>
Total .....		\$211,232.99



## REPORT OF THE BOARD OF VISITORS

To the Board of Trustees,  
Clemson Agricultural and Mechanical College,  
Clemson College, S. C.

Gentlemen:

Pursuant to appointment, the 1925 Board of Visitors met at the college the first Wednesday in May, which was May 8, for the purpose of making the inspection provided in the By-laws of the Board of Trustees. There were five members present, two absent, as follows—

1st District—W. W. Smoak .....	Walterboro
2nd District—Col. R. B. Watson .....	Ridge Springs
4th District—W. P. Conyers .....	Greenville
5th District—G. Walker Duvall, .....	Cheraw
7th District—Dr. E. C. Ridgill .....	Batesburg

The absent members were:

6th District—J. J. Lawton .....	Hartsville
3rd District—Dr. R. C. Grier, .....	Due West

We arrived at the college near noon Wednesday, May 8, and were quartered at the home of the late Dr. Riggs, the Trustees' House being occupied as a temporary home for a portion of those who were left without a place to work because of the recent disastrous fire which destroyed the agricultural building.

After organizing by the election of Mr. W. P. Conyers, Greenville, as Chairman, and W. W. Smoak, Walterboro, as Secretary, and under the tutelage of Acting President S. B. Earle, we began our inspection of the college, following a carefully prepared itinerary. A day and a half is entirely too short a time in which to make a careful inspection of all the various activities of South Carolina's only agricultural and mechanical college. The activities of the college are too widespread and comprehensive to permit a detailed examination into every phase of the work being done by the institution.

The Board of Visitors were impressed with the wide range of instruction offered students at Clemson. Should it be possible for a student to come to the college and not even enroll in any definite line of study, the four years of a course might very profitably be spent in observation, and such student would leave with a vast amount of valuable information. We were especially impressed with the wisdom of the founders in establishing such college and with its full development along the lines planned by its founders. Such a conception of an educational institution could only have come to a man, or men, filled with inspiration and prophetic vision. To have been the first men to have planned such a field of useful instruction in the things in life which mean so much for the development of manhood, is an accomplishment which may well fix him as one of the great men of all times. To all those who have had



a hand in the further development of the first great idea, the State and Nation owe a debt of gratitude. The institution was well planned and well founded. Small wonder is it, therefore, that there have been gathered here men who have devoted the best part of their lives to further perfecting and developing the first great ideas of Thos. G. Clemson, Benjamin R. Tillman, and the first Trustees appointed under the will of Mr. Clemson. The efficiency of the school is due largely to the ability and fidelity of these heads of departments, its officers and co-workers.

Clemson College in the spring time is a beauty spot. Carefully planned and laid out, there is nothing from the viewpoint of the architect or landscape gardener to mar the natural beauty of the college and its environs. Hence, we would recommend that in the future every building erected be placed and planned with a view to continuing this symmetry and beauty.

We viewed the ruins of the agricultural building, which was recently destroyed by fire, and while its loss was a serious blow to the college, we see in this calamity an opportunity to build further and well. The suggestion made by Acting President Earle that the remains of the agricultural building be repaired and remodelled so as to accommodate the College Library, and that a new agricultural building at a separate place be erected, meets with our unqualified endorsement. If it requires the sanction of the General Assembly to do this, we trust that the Board of Trustees await their next session before attempting to rebuild. To do this will permit the use of valuable space in the main building now occupied by the Library, for class rooms, will give room for the further expansion and use of the Library, and will permit the erection of an agricultural building more suited to the modern needs of the activities of the department.

The Board of Visitors were impressed with the variety of food given the students and with the great care taken to see that only the best is served. The sanitary conditions of the kitchen and messhall could hardly be improved upon. It seemed to us that an abundance of food is provided and that it is carefully and well prepared. That the records kept in this department showed that not a single complaint had been filed since February 18th, we consider a remarkable tribute to the ability of the official in charge. We ate dinner with the cadets on Thursday, May 7th, and talked with students about their fare. No complaints were noted, and the students seemed well pleased with the variety and quality of the food served.

We attended chapel services Thursday morning, and were impressed with the earnestness and apparent religious zeal of the student body. We were impressed with the reports made as to the important part played by the Y. M. C. A. activities, and the religious fervor of many of the cadets as evidenced by their voluntary devotions conducted in barracks as well as in religious gatherings. We surmise that this spirit is more pronounced now than prior to the time of the recent trouble at



the college in which many students left. It is a healthy indication of a better spirit.

The military feature was carefully explained to us by Col. Cole, the Commandant, who went into details in discussing military features of the college. We are impressed that not too much military disciplines is imposed. The splendid dress parade we witnessed, through the courtesy of the Commandant, showed that the cadet corps is well versed in the arts of military movements. Their clean cut appearance and their manly bearing indicate the usefulness of this feature of their training.

A ride over the farms and inspection of the cattle and hogs, show that there is enough of this to give ample instruction in agriculture and live stock. We feel that if it could be worked out in a way not to interfere too seriously with their work at the college it would be a good idea for those students of the agricultural courses to have some time spent during their course in other sections of the state receiving instruction in other than the Piedmont section of the State. This is important now that the boll weevil conditions are to be a factor in producing cotton and that truck growing forms so important a part in modern agriculture. It may be that in the near future it will be found necessary to equip the Coastal and Pee Dee experimental stations so that the agricultural students may spend a part of the year at these points studying crops under different climatic and soil conditions. The lack of dormitory space at the college may make this advisable as the number of students increase as will surely occur in the near future.

We wish to congratulate the Trustees for their efficiency, foresight and faithfulness in the discharge of their duties to their institution, and to commend them for the courage and wisdom they have shown in safely guiding its affairs. We feel that the historical and legal information on file at the college definitely settles the purpose of the institution, the life trustees and their successors, and that this arrangement should be inviolate. We find upon inquiry that no friction exists between Life and State Trustees, and feel that there should be no effort made to change this status. The college has grown and prospered under the present plan and nothing could be gained, it seems to us, by a change at this time.

Finally, we wish to express our thanks to the officers and students for their unfailing courtesy, and to commend the efficiency and harmony existing in the faculty, and the loyalty of the students and officials to their institution.

Very respectfully submitted,

(Signed)

W. P. Conyers, Chairman

W. W. Smoak, Secretary

E. C. Ridgell

G. W. Duvall

R. B. Watson.

(Board of Visitors, 1925)



**REPORT OF EXTENSION SERVICE****July 1, 1924 to June 30, 1925**

Mr. S. B. Earle, Acting President,  
Clemson College, S. C.

Dear Sir:

There are certain outstanding accomplishments this fiscal year that deserve special mention.

1. Of course, the great problem in South Carolina is the successful production of cotton under boll weevil conditions. The county agents conducted 645 cotton demonstrations, including methods of boll weevil control, the use of delinted cotton seed, the use of pedigreed seed, and the spacing of cotton. A greater number of the demonstrations, however, were demonstrations for controlling the boll weevil. The results obtained during the past several years are having a telling effect in the attitude of the people toward boll weevil control. There is noticeably less confusion over proper methods, so much so, in fact, that the Extension Service was able to launch this spring, and carry through the most satisfactory year's work up to this time as far as fighting the boll weevil is concerned. From now on it will be a matter of perfecting the accepted program of opposition to this pest. The program itself is practically agreed upon by all thinking people.

2. There were 9,000 boys and girls in our club work, the largest enrollment in the history of the Extension Service. Fifteen hundred boys completed their records, making crops valued at \$54,223.31 at a cost of \$14,476.48. In Anderson County, 102 boys averaged a bale of cotton per acre and made a net profit of \$14,000.00. This achievement stands out as one of the greatest records in the history of club work since its beginning in the United States.

3. Greater interest has been manifested in the growing of peaches and dewberries than at any time in the history of the state. While there were only fifty cars of peaches shipped out of the state in 1924, our local markets for home consumption were furnished with the largest supply of any time in recent years, and the character of fruit was exceptionally fine. The interest of the people in pruning and spraying as directed by our agents and specialists is greater than heretofore, and the prospect for the increased shipment of peaches in 1926 is unusually good, with hundreds of acres of young orchards coming into bearing for the first time. Many cars of dewberries were shipped for which profitable prices were received. This horticultural development is largely in the sand hill section of the state, and by this development those lands are greatly increasing in value.

4. The interest and increase in poultry have been phenomenal. Two years ago the first car of poultry was shipped from the state. In



1924 twenty-six cars were shipped, and in 1925 the shipment will be between 50 and 100 cars. The character of the poultry has been greatly improved largely through the efforts of our poultry specialists and county agents.

5. There is no line of work that has attracted more attention than the marketing of farm products. Shipping-point inspection was given in cooperation with the United States Department of Agriculture to the growers of Irish potatoes, certain truck crops, peaches and dewberries. Seventeen thousand cars of perishable products were shipped from South Carolina as against three thousand cars ten years ago. There is no state in the Union that is so well organized with commodity cooperative marketing associations as South Carolina. Cotton, tobacco, peach, sweet potato, and dewberry growers have their marketing organizations.

At the suggestion of the Extension Service, the sweet potato, peach and dewberry growers have federated and perfected an organization known as the Carolina Cooperatives, consolidated. Through this organization the peaches, dewberries and sweet potatoes will be marketed, and other products of the farm that are not organized. The Extension Service is beginning the organization of county marketing units, some of the products handled by these units to be sold through the Carolina Cooperatives, Consolidated. The object of the consolidation was to reduce the overhead expense. It might be interesting to know that three counties in which marketing units have been organized—Dardington, Clarendon, and Williamsburg—have sold for the farmers nearly a million dollars worth of farm products. The products these organizations have handled were small surpluses of corn, oats, peas, beans, pork products and practically anything grown on the farm. This is the first attempt that I know anything about of organizing to sell the small surpluses of the small farmers. This is recognized as the most difficult problem in marketing.

6. The dairy has held its own notwithstanding the fact of the failure of our grain and forage crops in 1924. We still have nine creameries in operation, furnishing a cash market to the farmers for their surplus dairy products. Great attention has been called to the possibilities of dairying in South Carolina through a world's champion Jersey developed by Mr. Fred Young, located near Florence. This is the first world champion cow ever developed in the South. The feeding of this cow was recommended and largely supervised by W. J. Keegan of Florence, one of our dairy specialists. Nothing that has recently happened in the dairy world has created such a sensation as the development of this world's champion cow in South Carolina.

7. Unfortunately the price of hogs and beef cattle has been until recently at such a low figure as not to encourage our people to produce



either at an increasing rate for market. In fact, there were 85,000 fewer hogs in the State January first than a year previous. The production of hogs for market moves in fairly definite cycles due to the fact that when they are scarce it takes some time to replace the swine population, even under the encouragement of favorable prices. Results are beginning to be evident, however, of the stimulus of better prices, and we shall probably have a gradually increasing hog population as long as prices hold up. However, there is little evidence yet of interest in beef cattle. The raising of sheep under favorable conditions has been encouraged for several years and we are glad to note progress is being made in this important phase of husbandry.

8. The year 1924 was a very unsuccessful year for the production of food and feed crops for man and beast in South Carolina. There were less corn and hay products in South Carolina last year than at any other time in recent years. However, there was a large increase in the development of pastures especially with the combination of lespedeza and carpet grass. These grasses hold out the possibility that the South can equal any section of the country in grazing. The increase in the acreage of soybeans has been by leaps and bounds. This crop is becoming one of importance in nearly all sections of the State. Advantage was taken of the well deserved popularity of the Ootootan and Biloxi varieties by certain dealers who substituted seed of worthless varieties in supplying many farmers in this state and this resulted in a failure of this crop this summer wherever the fraudulent seed had been planted. Mr. Hamilton, our extension specialist, has spent much effort tracing the sources of these fraudulent seed, and it is believed that those who practiced fraud will be prosecuted by the Federal authorities.

9. The bee industry has attracted great interest, especially in certain counties in the state, where it has reached surprising proportions. The output in money and bees brings a revenue to the bee-keepers of the state of something near a million dollars per year. Unfortunately a serious disease new to South Carolina made its appearance this summer, and it may result in great loss to bee-keepers. Our specialist is engaged in locating and taking measures against this disease which is known as American foul-brood.

#### **FUNDS FOR EXTENSION WORK FROM ALL SOURCES.**

**Fiscal Year Ending June 30th, 1925.**

1. State Appropriation (State Smith-Lever) .....	\$110,862.85
2. Federal Smith-Lever Appropriation .....	156,014.49
3. County Funds .....	116,043.17
4. U. S. Department of Agriculture Funds .....	30,200.00
5. Miscellaneous Funds .....	7,000.00
Total Resources .....	\$420,120.51

Of this total \$135,542.17 was spent for home demonstration work under supervision of Winthrop College.



**PUBLICATIONS**

Number and character of publications July 1, 1924, to June 30, 1925.

(a.) **Extension Bulletins.**

No. 63, "Cream Production," a 30-page publication discussing factors that influence quality of cream, factors that determine grades of cream, process of clean milk production, how to wash and sterilize dairy utensils, etc.

No. 64, "Poultry raising for Club Members" (First year course for boys and girls), a 56-page publication giving the aim of poultry work for boys and girls and an outline for first year course of study; also poultry songs and yells, reference bulletins, etc.

No. 65, "Poultry Raising for Club Members" (Second Year Course for Boys and Girls), a 44-page publication giving material supplementary to that in No. 64 to serve as a second year course of instruction in poultry work for boys' and girls' clubs.

No. 66, "Sheep Production," a 32-page publication discussing advantages and disadvantages of sheep raising in South Carolina, breeds of sheep, care and management of flocks, pests and diseases of sheep, judging sheep, etc.

No. 67, "Marketing Grapes," a 12-page publication discussing varieties, harvesting, picking, trimming, packing, containers, grades, loading, and packing sheds.

No. 68, "Marketing Irish Potatoes," a 16-page publication discussing varieties, yields harvesting, grades and grading, packing and containers, cars and loading, standardization, etc.

(b) **Extension Circulars**

No. 58, "Peach Spraying," a 4-page publication giving spray schedules, preparation of materials, formulas, amount of spray to use, etc.

No. 59, "Farm Orchard Spray Calendar," an 8-page publication discussing preparation of materials, self-boiled lime-sulphur, Bordeaux mixture, quantities to use, how to apply, and giving a spray calendar for various fruits.

No. 60, "Common Grape Diseases and Their Control," a 4-page publication discussing black rot, anthracnose, downy mildew, powdery mildew, dead-arm, sanitary measures, and giving spray schedules for grapes.

No. 61, "Apple Spraying," a 4-page publication discussing materials and giving spray schedules for apples.

No. 62, "The Mexican Bean-Beetle," a 4-page publication discussing spread of the pest, injury, seasonal activities, control and preventive measures.

No. 63, "Pecan Culture," a 12-page publication discussing varieties, transplanting, fertilizers, cultivation, cover and companion crops, harvesting and grading, and pecan diseases.

No. 64, "The Cotton Boll Weevil Situation," a 4-page publication giv-



ing briefly factors influencing weevil abundance and weevil injury, weevil conditions during the past and present seasons, and recommendations for 1925 on weevil control.

No. 65, "Fertilizing Cotton for Economical Production," an 8-page publication discussing how much fertilizer to apply, time of applying, kinds of fertilizer for cotton, high analysis of fertilizer, etc.

No. 66, "Fertilizer For Corn," a 4-page publication discussing the importance of proper fertilizing, rate of application, and recommendations.

No. 67, "Better Pastures for South Carolina," a 16-page publication dealing with location of pastures, preparation of land, method of seeding, information regarding Bermuda grass, carpet grass, Dallis grass, herds grass, lepedeza, white clover, and burr clover, and the fertilization and the care of patures.

No. 68, "Home Garden Hand-Book," a 14-page publication giving general information, and garden calendar for spring and summer and fall and winter, together with spray formulas, etc.

**(c.) Information Cards.**

No. 26, (Revised from original issued Oct. 1922) "Harvesting, Handling, Storing, and Curing Sweet Potatoes," a one-page poster-card discussing time of harvest, handling, grading and grades, storing and curing.

No. 32, "Fall Boll Weevil Control," a 2-page mailing card giving briefly best fall methods, importance of community action, warning against burning, and value of cover crops in controlling weevils.

No. 33, "Poultry Egg Record and Calendar," a one-page poster card giving briefly suggestions on early hatching, growing feed, sanitary measures, and culling, with blank for egg record.

No. 34, "Home-Grown Feed Needed for Dairy Herd," a one-page poster card giving suggestions on feed requirements, rules for feeding, etc.

**(d.) Reports.**

"Making Better Farms and Homes," Annual Report for 1924, containing 60 pages, giving a summary of the farm demonstration and home demonstration work of the Extension Service for the calendar year 1924.

**(e.) Posters.**

No. 25, "Kill Your Enemy," a one-page publication to emphasize early destruction of cotton stalks.

**(f.) News Letters.**

No. 764 to No. 884 inclusive, a total of 121 mimeographed agricultural news stories mailed to newspapers.

**(g.) The Weekly News Notes.**

Vol. XIII., Nos. 1 to 52 inclusive, containing 10 to 15 miscellaneous articles giving agricultural news and instruction, intended primarily for newspapers and agricultural leaders.

**(h.) The Carolina Club Boy.**

Vol. III., No. 4 to Vol. IV, No. 3 inclusive, a monthly 4-page publication of news, instruction, and inspiration for members of boy's clubs.

**(i.) The Extension Dairyman.**



Vol. I, Nos. 1 to 10 inclusive, a 4-page monthly publication of information and instruction for farmers interested in dairying.

### FIELD CROPS AND PASTURES

On the average in the state approximately 70 per cent of the farmer's cash income is derived from the sale of farm crops. Decidedly the more important crops are cotton, corn, and tobacco. Corn is almost entirely consumed on the farms where grown. Hence, most of the cash is from cotton and tobacco. The farmers of the Piedmont section derived from 80 to 90 percent of their cash income from the cotton crop alone. Cotton is likely to continue to be the most important crop in the state and the most important source of cash for a considerable period of time. The more intelligent farmers now realize they can raise cotton under boll weevil conditions.

### BOLL WEEVIL CONTROL AND COTTON PRODUCTION

The following extracts from the annual reports of county agents in the counties mentioned are typical of the demonstration work in cotton production and boll weevil control. Altogether there were reported 675 cotton demonstrations with a total acreage of 13,216 or about 20 acres per demonstration.

BARNWELL COUNTY—"Five boll weevil control demonstrations were conducted. The use of fertilizers, good seed, proper cultivation, the proper use of calcium arsenate dust poison, which resulted in an increased yield of from 300 to 600 pounds of cotton per acre over cotton grown in ordinary manner."

CALHOUN COUNTY—"Mr. L. E. Pooser, living near Cameron, used poisons according to directions and reports that he has practically doubled his yield on poisoned areas over that unpoisoned.

"Mr. T. C. Moss, Cameron, used dust this season where he used sweetened poison last year altogether and states he has made 45 bales on 50 acres of land, that he is well pleased with dusting and attributes fully half his yield to dusting."

COLLETON COUNTY—"More than 40 cotton growing demonstrations were conducted, on most of which poison in dust form was used, and reports show gratifying results, none making less than a bale per acre, thus showing that cotton can be grown when the proper methods are employed."

DILLON COUNTY—"Eight demonstrations were conducted, but in some of these poisoning was not necessary on account of light infestation."

FAIRFIELD COUNTY—"I ordered 159 bushels pedigreed cotton seed for 12 farmers, advised many as to best fertilizers, and interested 8 farmers in proper use of calcium arsenate dust in controlling boll weevils."

GREENVILLE COUNTY—"Good farm practices such as proper preparation, fertilization, spacing and cultural methods, I have found to be of



greater importance under boll weevil conditions than before we had the weevil to deal with. Five demonstrations following these good practices made a bale per acre on 300 acres without the use of poison. Poison was not used on these farms because the infestation was never high enough to justify it.

"On three farms the infestation was serious and poisoning advised with very profitable results. Mr. B. B. Medlin started using dust poison on August 4 with an infestation of 25 percent. He had previously used sprays and mops but in spite of this the infestation continued to climb. Three applications of dust were used and the infestation promptly and materially reduced. He found the dust cheaper, more satisfactory to apply, and credits it with saving him from 10 to 15 bales of cotton. Results on farms of Albert Harrison (colored) 40 acres, and Mr. E. N. Harden, 30 acres, were so similar to Mr. Medlin's that it is useless to repeat. On these three farms the infestation was heavy last year. They have good hibernating quarters for weevils."

LEE COUNTY—"Dusting demonstrations were conducted by Messrs. V. C. Elmore, A. E. Baker, J. C. McDuffie, H. W. Woodward, and Geo. M. Stuckey. They all report profitable returns and will dust next year."

McCORMICK COUNTY—"Twelve dusting machines were purchased, and the county agent made infestation counts and gave advice as to poisoning on 29 farms."

ORANGEBURG COUNTY—"Twenty demonstrations in the control of the boll weevil by dusting were conducted by farmers using power and traction dusters. The average results showed an increased production of lint cotton of from 100 to 200 pounds per acre. Several farmers using dust, produced as much as one and one-half bales per acre."

SALUDA COUNTY—"Satisfaction yields were made on all demonstrations using good seed, practicing early preparation and planting, proper fertilization, fast cultivation and being on the job in general. An outstanding feature of this year's work was the large number of farmers advised on the subject of proper poisoning, and very little patented weevil poison was sold in this county."

### SEED IMPROVEMENT

One of the most important phases of the agronomy work during the past few years has been the improvement of seed. Since this work has been in progress, very marked improvement has been made in the quality of the seed, especially of cotton seed on the market in this state. A great many more farmers are using purebred seed now for planting purposes than used them before. The supply of purebred seed has been greatly increased. It is difficult to estimate the value of this work, but there is no doubt that it has added much wealth to the state through increased yield and through improved quality of our crop.



As usual, this work has been conducted on a strictly community basis, with one community leader in a section and the neighbors as cooperators.

There were 43 community leaders and 128 cooperators with 4,000 acres of pure cotton and 1,600 acres of pure corn.

Fifteen of the community leaders own private gins where they not only handle their good seeds, but gin for the cooperators around them.

SOYBEANS.—During the past two or three years we have been giving some encouragement to the development of soybeans and peanuts. Both of these crops have considerable possibilities as cash crops. In sections of the state where boll weevil infestation is heaviest, they can and should be used to a large extent as substitute cash crops. Farmers who have handled either peanuts or soybean crops intelligently have made a profit from them which compared reasonably well with the profit made from cotton. In addition to the possibilities from these crops as cash crops they have even greater possibilities as feed crops and soil building crops. The soybean in particular should receive a large amount of attention in this connection. Some of the newer varieties of soybeans, such as the Biloxi and the Otootan, make phenomenal yields of hay. In fact, they make from two to three times as much hay per acre as the cowpea, and considerably more than the velvet bean. One of the great advantages of this crop is that it can be planted with corn, either by planting corn in wide rows six to seven feet apart and planting soybeans in rows half way between the corn rows, or by planting the soybeans right in the drill with the corn when the corn is put in rows closer together.

The possibilities of these same varieties of soybeans for soil building are also outstanding. The enormous yield of hay which they make when plowed under goes far to enrich the land. A good crop of soybeans in the Coastal Plain section of this state will give as much nitrogen as half a ton of nitrate of soda and in some cases more. The farmer who neglects the use of these crops in soil building is neglecting one of his greatest opportunities.

Orangeburg and Calhoun Counties still lead in the production of soybeans. Their use in these two counties is almost universal and nearly to the exclusion of all other summer legumes. Soybeans have become one of the leading field crops in these counties and are rapidly becoming so in other counties.

There are probably 300 harvesters in the state at the present time. They have proved very successful and the presence of one in a community greatly influences the acreage of beans saved for seed.

The county agents reporting have listed 512 plantings of soybeans with a total of 5,507 acres. Some of these plantings were grazed by cows and hogs. The average yield of seed were from 9 bushels to 27 bushels per acre and from two to four and one-half tons of hay per acre.

One of the most encouraging features of the farmers' experience in us-



ing soybeans was the splendid gains obtained by grazing soybeans. Many farmers who practiced this for the first time were astonished at the rapid gains made by the hogs at so small a cost. As this year was one of a very small corn crop this feature of soybeans was decidedly important.

PEANUTS—The lower half of South Carolina which is included in the sand hill section and the coastal plain section is ideally suited to the growing of peanuts. The soil types, labor, machinery on the farms, and farming systems are adaptable to this crop with very little change. All peanut work has been done in this section of the state, with the exception of some assistance given to a small group of farmers of York County around Clover, who have a peanut association.

One positive result was obtained in peanut growing this year, and it established a practice long advocated by the Extension Service and Experiment Station workers—, that of close spacing of the nuts in planting. Definite and concrete results were obtained in higher yields wherever close spacing was practiced and it will be universally followed hereafter by peanuts growers.

In December, 1924, report of the agricultural statistician for South Carolina gives the average per acre return from peanuts as \$42.00 and from cotton \$35.35. During the past three years the average return from peanuts per acre has been \$46.66, and for cotton \$41.69. The cost of producing an acre of peanuts is generally estimated as approximately half that of an acre of cotton.

The lack of adequate picking machines is one factor that has been holding back the peanut industry. A picker costs from \$500 to \$600 and an engine is required to run it. This cost is prohibitive to the average farmer. The specialist, in cooperation with several county agents, was able to get a man or men in each of several communities to buy such an outfit and to do custom picking, thus giving the smaller farmer an opportunity to grow a small acreage of nuts and have them picked properly.

There are three peanut cleaning and shelling plants in this state and one in Augusta, Georgia, all of them buying in this territory, with the addition of several traveling buyers from peanut plants in Virginia.

The two largest peanut growers in this state, C. W. Huffman of Columbia, and Jumper Brothers of Springfield, had a very successful year, and so did many other small farmers. Mr. Huffman states that he averaged about 1,200 pounds of nuts per acre and that peanuts were his most profitable crop.

PASTURE WORK.—The reports of the county agents show there is an increase of pasture work in the state for the year 1925. A questionnaire was sent to those farmers who were listed by the county agents and 347 replies have been received to date. The following summary of information has been compiled from these reports.

Total acres of pasture (347 reports)—33,192, average size 96 acres.



Estimated approximate months of grazing per year (347 reports) vary from three to twelve months—average estimate for all is 8.1 months.

Sixty-six reports reporting Bermuda grass and no carpet grass vary from three to ten months grazing period—average 5.9 months.

Two hundred eighty-one reports reporting carpet grass in the mixture vary from four to twelve months grazing period—average 9.1 months.

The above shows the total average for all pastures over the whole state is about eight months grazing period and that carpet grass gives about three months longer grazing throughout the year than Bermuda. Forty-eight farmers reporting carpet grass in the mixture estimate twelve months grazing for the year.

To date reports have been received from 126 farmers who have filled out the report blank on burr clover. These 126 farmers report having grown burr clover from one to twenty-five years—average seven years. They report having one to 100 acres or an average of 10.7 acres per farm.

All farmers reporting agreed that there was a saving of the amount of commercial fertilizer necessary to be used in succeeding crops.

### HORTICULTURE

Most of the work in Horticulture has been done on (1) home orchards, (2) commercial orchards, (3) home vegetable gardening, and (4) truck crops for market.

HOME ORCHARDS.-- The ultimate state goal is to have every farmer and home owner in the state in reach of a good home orchard, and until such is the case the home orchard project will be pushed to the fullest.

The large cooperative orders for fruit trees made each year are evidence of the fact that the people have begun to realize the home orchard is a most valuable asset.

The chief problems in this line of works are pruning, spraying, cultivation and fertilizing.

COMMERCIAL ORCHARDS.--- We have only 6,000 acres in peaches planted for commercial purposes, 90 percent of which range in age from one to four years. Almost all our apple, pecan, grape and dewberry plantings are recent developments. These commercial plantings are the result of a few successful demonstration. The following is a summary of the commercial orchards in South Carolina:

**TABLE—SUMMARY OF COMMERCIAL ORCHARDS**

	No. Orchards	No. trees or vines
Apple Orchards .....	61	32,016
Peach Orchards .....	236	600,510
Pear Orchards .....	43	18,000
Pecan Orchards .....	58	10,000

#### Small Fruits

	No. Orchards	No. trees or vines
Grapes .....	31	25,200
Dewberries .....	36	800,000
Blueberries .....	34	36,000
Strawberries .....	17	200 acres



**HOME VEGETABLE GARDENING** Seven hundred and thirty-six interested home gardeners have been reached regularly during the year by means of a "Monthly Garden Letter", reminding gardeners of timely operations necessary in order to have a year-round garden. The chief problem is lack of knowledge as to when to plant different vegetable in order to have a year-round garden. This information is supplied regularly to those requesting it, and results in sustaining much greater interest in having a good garden. Many expressions of appreciation of the garden letters have been received.

**TRUCKING.**--- In South Carolina, the leading trucking counties are Beaufort and Charleston. The principal crops there are lettuce, Irish potatoes, string beans, tomatoes and peppers. In Barnwell, Bamberg, Allendale, and Hampton cucumbers, cantaloupes, and watermelons are the principal truck crops.

Barnwell, Edgefield, Saluda, Allendale, Calhoun, Dorchester, and Hampton Counties are increasing their acreage in asparagus. This crop is increasing in popularity every year, and it looms larger in some counties as a successor to King Cotton than any other truck crop.

The trucking industry is getting established in a small way in the counties of Orangeburg, Clarendon, Sumter, Williamsburg, and Florence, and it is in these new sections that the specialist does his main truck work.

Fall trucking is becoming more and more important in the Piedmont and several sections of the state.

The following statistics show how important an industry trucking is becoming in South Carolina:

Crops	1923		1924	
	Acreage	Farm Value	Acreage	Farm Value
Cabbage	3,450	2,300,000	2,550	696,000
Snap beans	4,600	1,175,000	4,490	517,000
Cucumbers	2,780	970,000	3,560	484,000
Watermelons	11,200	886,000	11,550	407,000
Tomatoes	1,600	235,000	1,900	277,000
Spinach	1,200	475,000	1,500	173,000
Lettuce	1,980	359,000	1,310	271,000
Strawberries	460	237,000	540	133,000
Green peas	1,630	186,000	1,720	163,000
Cantaloupes	1,070	115,000	500	45,000
Asparagus	2,080	410,000	3,000	914,000
Carrots	120	59,000	210	66,000
Potatoes (Irish)	15,520	3,963,000	19,000	3,566,000

In the new sections meetings are held and the crops to be planted are discussed in detail. Farmers are advised not to plant too heavily in one crop.

By organizing and cooperating, the growers are able to get carlot shipments by combining the products of several farms at one central point.

**ASPARAGUS:** South Carolina occupies an important place in the asparagus industry California is her most important competitor. In 1923, California shipped 458 cars, while South Carolina shipped 154.



In 1920 increased acreage planted to asparagus was 30 percent; while in 1924 the increase over 1923 was 34 percent.

**SWEET POTATOES:** Growing sweet potatoes for shipment to northern markets from South Carolina has been done largely through the South Carolina Sweet Potato Association, which has built up a good market for this crop. Unfavorable seasons have prevented the planting of a normal crop in 1924.

**TABLE—SUMMARY OF DEMONSTRATIONS CONDUCTED IN TRUCKING**

Market gardens .....	12	Celery .....	17
Fall trucking .....	29	Lettuce .....	20
Sweet potato demonstration ....	111	Cucumber diseases .....	17
(a) Seed treatment .....	39	Watermelon .....	7
Irish Potato demonstration .....	204	Watermelon seed treat-	
(a) Seed treatment .....	39	ment demonstrations.....	5
Tomato demonstrations .....	57	Cantaloupe .....	49
Snap bean demonstrations .....	194	Onion .....	13
Peas garden demonstrations .....	3	Beets .....	3
Asparagus .....	72	Cauliflower .....	1
Spinach .....	5	Cabbage .....	22
Radishes .....	1	Carrots .....	1
Trucking (General) .....	11		

### FORESTRY

Having realized for years the importance to the state of its forests and the income therefrom, present as well as potential, a forestry engineer was employed and he began work in September, 1924, with the following immediate objectives:

To stimulate interest in:

1. The production of more and better timber.
2. The proper management and use of our existing timber.
3. The prevention of forest fires damage.

Involved in our forestry work is the problem of the most profitable use to make of land. Interest in this subject is being caused through newspaper contributions, personal visits, lectures, and otherwise. Demonstrations in growing pine seedlings, reseeding land, transplanting, etc., are underway in several southern and coast counties. Cooperation of the state lumberman's organization and of prominent citizens is proving very helpful in initiating this work.

### PLANT DISEASES

The Plant Disease Survey Report of the United States Department of Agriculture compiled in cooperation with Clemson College, showed the following losses caused by plant diseases in South Carolina during 1923.

#### Losses From Plant Diseases:

Cotton—thirteen percent of the crop, 103,000 bales; corn—four percent of the crop, 13,306,800 bushels; oats—six percent of the crop, 643,680



bushels; wheat—eight percent of the crop, 154,000 bushels; potatoes—twenty percent of the crop, 627,200 bushels; sweet potatoes—ten percent of the crop, 990,000 bushels; tomatoes forty-two percent of the crop, 3,864,000 pounds; peaches—forty-one percent of the crop, 225,000 bushels; apples—fourteen percent of the crop, 38,360 bushels; grapes, seventeen percent of the crop, 501,840 pounds.

There was a time when it was considered practically impossible to produce disease-free and marketable peaches and grapes in South Carolina, but the spraying practices which have been taught and demonstrated through this service have put these industries on their feet and South Carolina is now an important producers of both of these crops.

### ENTOMOLOGY

During 1924 two distinct lines of work were conducted, (1) Control of injurious insect pests; (2) Beekeeping.

The insect control work is described in connection with the various crops under the "Field Crops" and "Horticulture" sections of this report, and is not repeated here.

We have been fortunate in securing to take charge of the entomological work Professor Franklin Sherman who has been with the North Carolina A. & M. College for many years. We have also employed Mr. J. O. Pepper as a full time worker in entomology and he has been very busy during this summer with boll weevil work and work with insect pests of less importance.

Sumter County is taking the lead in 1925 in fighting the boll weevil if we may judge by the number of dusting machines and the amount of poison purchased. Over a million pounds of calcium arsenate and about 500 power dusters were purchased. Marlboro and Orangeburg Counties came next and throughout the coastal plains counties machines and dust have been purchased in proportion to the acreage in cotton with a few exceptions.

### LIVESTOCK

The possibility of cheap production must be more generally understood or market conditions must greatly improve before a large stimulation will be realized, especially in beef cattle production. It now appears that the markets are improving for hogs, and farmers have been advised to retain brood sows so to have more hogs during 1926. Cheaper production of all kinds of livestock is also becoming more generally understood. Carpet grass, lespedeza, white clover, Bermuda grass, Dallas grass on permanent pasture lands are proving the truth of the statement that the South should be able to produce livestock due to our long growing seasons. Coupled with soybeans and velvet beans in corn, and rye and rape for temporary grazing, an increasing number of farmers are learning the fundamentals of cheap livestock production.

There is once again an increasing interest in sheep, following a half century of decreasing production. Whether this interest will prove to be permanent will depend upon whether (1) modern methods of disease and



parasite control are practiced, (2) economical methods of feeding and management are worked out and applied by growers, (3) good blood is introduced to improve native scrubs, and (4) losses from dogs are prevented.

Undoubtedly many farmers could manage a few sheep profitably though there is no occasion for plunging by individuals.

**TABLE—SUMMARY OF LIVESTOCK DEMONSTRATIONS**

Number persons pledged to use only purebred sires with all classes of livestock .....				312
Number butchering, meat cutting and curing demonstrations ...				24
Fencing demonstrations .....				9
Demonstration in	Hogs	Beef Cattle	Sheep	
Feeding .....	146	10	1	
Forage Crops .....	503	8	7	
Permanent Pastures .....	259	33	13	
Herd Management .....				
Breed Selection and Judging .....	35	5	2	
Shearing, Castrating and docking .....			7	
Carloads marketed cooperatively .....	94	1	12	
Purebred Sires Placed .....	104	9	12	
Purebred Females Placed .....	24	1	11	

#### DAIRYING

New bull associations started .....	1
Old bull association reorganized .....	3
Counties in which bull association work was done .....	14
Total bull associations now active in state .....	10
Number first class dairy bulls placed with individuals .....	20

Better dairy sires mean better milk cows. Owing to the official testing work we now have production records on many purebred dairy cows in the state. Fifty-eight such records were completed in 1924 and these cows produced an average of 11,468.8 pounds of milk and 533.30 pounds of butterfat, equivalent to 622 pounds of butter. Bull calves from cows like these are the kind that are being placed by extension agents. They will raise the average production of our milk cows at the smallest cost possible, and the testing work shows that it is no longer necessary to go outside the state for first class foundation blood for a purebred herd.

#### Calf Club

A boys' Jersey Calf Club consisting of thirty enthusiastic members was in operation during 1924 in Lancaster. Each boy owns a purebred Jersey heifer and an exhibit was arranged of those early in November. Hundreds of people saw this exhibit and much interest in dairy cattle was aroused. There were calf clubs in Pickens, Greenwood, and Florence Counties. For 1925 there is an increase in this line of work and reports will show better results than ever before.



**Cooperative Buying.**

In the cooperative buying of farm requirements the matters in which Extension Service agents have assisted most commonly are (1) planting seeds for field crops, cover crops, summer legumes, pastures and truck crops; (2) orchard necessities, including trees, spray materials, spray pumps, etc.; (3) fertilizers and lime; (4) government explosives; (5) poultry and bee requirements, including incubators, brooders, feeds, queen bees, etc.; (6) farm implements and fencing, including dusting machinery for cotton boll weevil.

The total amount of cooperative purchases amounted to \$232,093.10 in value, and the saving effected due to the service of the agents was \$42,350.99. The total of the buying and selling was \$743,677.53 in value and \$139,292.46 in saving. The policy in reference to cooperative purchase of farm requirements is to assist with such items as are not being handled locally or which are not available at a fair price to farmers. Wherever a farm requirement is being sold by a local dealer on a fair basis, there is no reason for a public agency to interfere and the Extension Service policy is to let well enough alone.

**Marketing Demonstrations.**

Altogether there were about 2,500 marketing demonstrations in grading, packing, loading, etc., given by extension agents during the year for the purpose of teaching proper methods. The immediate money value is not the greatest value nor is it the prime object in much of our marketing work. For example, in the cooperative purchase of orchard supplies, sprays etc., the greatest benefits are from the agents having taught the use of these in fruit production. The saving through cooperative purchases, while important, is really only incidental in many cases to the larger undertaking of promoting a diversified and balanced agricultural system.

Respectfully submitted:

W. W. Long  
Director.



## REPORT OF S. C. EXPERIMENT STATION

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Mr. S. B. Earle, Acting President,  
Clemson College, South Carolina.

Dear Sir:

Below is given a summary of the Annual Report of the South Carolina Agricultural Experiment Station for the fiscal year ending June 30, 1925. The full report of the director is published under separate cover as is required by law.

Agricultural Research work as conducted by the staff of the experiment station aims to find new facts and develop improved practices for the benefit of our farms, farm homes; and for promoting the happiness and prosperity of all of our people. The members of the experiment station staff are the technically trained experts in this business of farming which engages the attention of the large majority of our people, and it is largely through the scientific discoveries made by them that our agriculture is improved and farming made more profitable. The increased efficiency of the 170,000 farms, the proper utilization of the 13,000,000 acres of cut-over waste and forest lands, the improvement of living conditions in the 400,000 homes of the state, together with certain economic and social problems confronting all of our people, are carefully considered in selecting the lines of investigation to be presented.

The unusual season which obtained this year has served to emphasize again the great value of agricultural research to our people. During favorable seasons unscientific and indifferent practices employed by the careless and uninformed sometimes result in satisfactory yields, but during seasons of heavy rains and extremely dry weather such practices are disastrous and stand out in great contrast when compared with the approved practices based on scientific research. It is during seasons unfavorable to crop production that the intelligent application of science to agriculture produces most outstanding results.

The period covered by this report has been very unusual in several respects. The seasons of 1924 and 1925 were both far from normal, one representing an unusually wet season, and the other an extremely dry season. In the Coastal Plain the average rainfall for the period from April 1 to October 1 is 30 inches. In 1924, 41 inches fell during this period, and in 1925, the rainfall for the same period was only 15.64 inches. In the Piedmont section the 30-year average is 27 inches for this same period, while 32 inches fell during the summer of 1924, and only 10.76 inches between April and October 1, 1925.

These seasonal extremes have a marked influence on our research work. In some cases the results of the field experiments have been completely masked by the seasonal factors, and in other cases the re-



sults have been intensified by the extreme conditions. In our cotton research and boll weevil control work, especially, the weather has been an exceedingly important factor. When we have continued rains during June and July the weevil increases very rapidly and opportunity is offered for testing the efficiency of different methods of control. When dry weather prevails during these months the weevil is kept in check and it is not possible to conduct satisfactory experiments in methods of weevil control. On the other hand, the reaction of the cotton plant to the varying moisture and climatic conditions, and the effect of these on the growth and fruiting habits of the plant make it profitable to conduct plant studies with cotton during all kinds of seasons. It is not only necessary for us to find out the best spacing and the best cultural practices, the best varieties and the best fertilizers to use during average seasons, but if we are to remove some of the hazards from cotton production we must also know which practices are best for wet seasons and for dry seasons. In working out sound farm practices, then, it is very necessary that experiments be conducted over a long period of years. While the dry years are exceedingly discouraging to our farmers and the wet years are sometimes quite disastrous, the research worker who is striving diligently to make farming a safe business gains valuable knowledge from these extremes as well as from his experiments conducted during the normal seasons.

The loss of the Agricultural building with our research library, pathological, entomological and agronomy laboratories, has proved a serious handicap to many phases of our work during this year, and has caused us to have to start over again with some of the important lines of research which were well under way.

The favorable seasons in the eastern part of the state have made it possible to produce excellent crops at the Coast Station and the Pee Dee Station this year, and very satisfactory progress has been made there with almost all lines of research.

The passage of the Purnell Bill by the National Congress in February has provided funds, available July 1, 1925, for enlarging the work in farm and home economics, and has furnished additional support for other lines of work that were lagging. The first year's allotment of this fund is being expended largely for cooperative studies in farm management, cost of production, marketing, finance, credit and tax investigations, and research in home economics. This affords the first opportunity that we have had to investigate these very important economic and sociological questions, and we have every reason to believe that the research work that this appropriation is enabling us to begin will prove of great value in our agricultural development.

A short summary of the accomplishments of the year, and report of progress on the more important projects of this experiment station is given below. A list of problems now being investigated and a financial statement for the year will be found at the end of the report.



### RESEARCH WORK WITH COTTON

From the standpoint of acreage planted and money value produced, cotton continues to be our most important crop. It is interesting to note the changes that have taken place in the acreage and yield of this crop during the past 40 years. In 1884, we planted in South Carolina 1,716,128 acres, and produced 511,800 bales, or an average of 150 pounds per acre. Both the acreage and the yield per acre increased from that time to 1920, when the acreage was 2,964,000, and the yield 1,623,000 bales, or an average of 260 pounds per acre. Between 1920 and 1923, there was a sharp decline in both the acreage and the yield per acre, the yield being 140 pounds per acre in 1921, and 123 pounds per acre in 1922. Since 1923, there has been an increase, the acreage in 1924 being about 2,000,000 acres, with a production of about 810,000 bales, or about 200 pounds per acre. In 1925, the Bureau of Crops Estimates credits us with 2,671,000 acres, and an estimated yield of 860,000 bales, which is only 152 pounds per acre. The United States Bureau of Entomology estimates that the average reduction in yield caused by the boll weevil is about 28 per cent. It would seem, therefore, that when we can reduce boll weevil damages to the minimum we should be able to continue to increase our yield per acre.

From studies which we have made in the cost of producing cotton on the experiment station farms and from farm surveys made on 333 farms in Anderson County, we find that there is a close correlation between the yield of lint cotton per acre and the cost of production. When the yield goes as low as 150 pounds per acre, which is the average for the entire state this year, and cotton sells for 18 cents per pound, the crop is produced at a loss. The eastern part of the cotton belt is now meeting keen competition from the states farther west where, on account of weather conditions, more fertile soil and low boll weevil damage, the cost of production is much less than in this section. The three large cotton producing states west of the Mississippi River,—Texas, Oklahoma, and Arkansas—have increased their acreage by 9,500,000 since 1919. In 1924, these three states produced 56 per cent of the American crop, and in 1925, their combined acreage to cotton totaled 25,000,000 acres, or 58 per cent of the cotton acreage in this country. If we are to meet this competition and continue to produce our share of the crop, we must learn to produce cotton more economically. The decrease in the yields during the past four years has been largely attributed to the boll weevil. Some seasons the weather damage has been heavy, but it is safe to say that if the dry weather had not reduced the yields the weevil probably would have. The big problem, then, in economic production of cotton in the future will be to work out a system which will enable us to get ahead of the weevil the average season and to control him with poisons during the seasons favorable to rapid increase of weevils in the fields. If, through our



research work, we can develop practices which will enable us to produce an average of one additional boll of cotton per stalk, the production in South Carolina on the present acreage basis would be increased by 250,000 bales, which, at the present price, would bring twenty-two million dollars. There is every reason to believe that such a small increase as this can be effected through development of better farm practices and without increasing the cost of production.

Our cotton research work, which is conducted in cooperation with the United States Bureau of Entomology, is centered largely at the Pee Dee Sub-Station in the Division of Boll Weevil Control at Florence. There are certain features of this work, however, which are conducted at Clemson College, at the Coast Station at Summerville, and in cooperation with farmers in eight different sections of the state. The form of organization at Florence remains the same as set up there three years ago when we organized our Division of Boll Weevil Control, Clemson College and the United States Bureau of Entomology cooperating in the undertaking. Dr. George M. Armstrong, who is a joint employee of Clemson and the United States Department of Agriculture, is in charge of the work. The men placed here by the federal government and by this station have shown an excellent spirit of cooperation and have worked together cordially and effectively.

The facilities for this work have been greatly improved by addition to the office building, the enlargement of the insectary, the equipment of a chemical and physiological laboratory and the construction of a greenhouse where cotton can be grown under controlled conditions at all seasons of the year. Dr. L. O. Howard, Dr. W. D. Hunter, Mr. B. R. Coad, and their co-workers in the Bureau of Entomology, continue to take an active and helpful interest in this project, and share with us the opinion that this station has already produced results which have greatly benefitted South Carolina and the entire southeast.

We also have ample evidence that the people of the state are appreciating the important work of this station. Between three and four thousand farmers and business men from different sections of South Carolina visited the station during the year and studied the results of the work. The cotton research work at Florence is also attracting the attention of workers in other countries. During the past two years scientists and cotton growers from Europe, Asia, Africa, and South America have visited this station and consulted with our specialists there. From our contact with these scientists of other countries and with the best cotton growers of our own state, and from an intimate knowledge of the thorough-going and fundamental research work under way at Florence, we feel that from the standpoint of the future of the cotton industry this is one of the most important research projects now under way anywhere.



### Weevil Biological Work

During the past two years Dr. F. A. Fenton and Mr. E. W. Dunnam, of the Bureau of Entomology, together with several scientific assistants, have made intensive studies of the life history and activities of the weevil at the Pee Dee Station and in the vicinity of Florence. Some very valuable data have been obtained from these detail studies of thousands of weevils. A total of 19,427 weevils were placed in sixty-five hibernation cages during September and November, 1924. These first began to issue from hibernation on March 6, and the last one emerged July 1, 1925. On April 21, 1925, when cotton was just coming up in Florence County, 50 per cent of the weevils had issued from the hibernation cages. On May 29, when the first squares were formed, 90 per cent of the weevils had emerged and, on July 1, they were all out from their winter quarters.

A point established definitely this year for the first time is the fact that fewer weevils survived in cages located in the open than in those situated in a pine woods. Another important point is the fact that the emergence from hibernation in the field cages was completed before it was from cages located in the woods. All of the weevils in the field cages were out of hibernation by June 17, while weevils continued to emerge from those situated in the woods until July 1.

As reported last year, the later the weevils were placed into hibernation, the greater number survived. Less than 2 per cent of the weevils placed in hibernation cages in September survived, while 13.62 per cent of those placed in cages from November 1 to 13 lived through the winter.

Daily observations were made on small areas to study activity of the weevil in the fields. On certain of these areas the weevils were counted and removed each day for the purpose of learning the number of weevils entering the fields daily during the emergence. On certain other of these areas the weevils were counted but were not removed and in this way the total weevil population was observed. Weevils began coming into these fields on April 27 and continued to come in from the woods until July 6. Practically all of the weevils that came into the fields early in the season died before the cotton began to form squares so most of the weevils that established themselves in the cotton fields during the summer of 1925 came out of hibernation during June.

Studies on the correlation of weevil activity with the growth of the cotton plant indicate that a square has to be at least 10 days old before it is large enough to mature a weevil. This means that successful reproduction of the weevil in any cotton field cannot take place until the oldest plants have squares 10 days old. Weevils must also feed on cotton for about ten days before they begin to lay eggs. These



facts illustrate how well the weevil is adapted to the growth habits of the cotton plants. Similar studies indicate how old a boll must be before it is immune to weevil attack. Twenty-six per cent of the bolls 1 to 10 days old were not injured by weevils in spite of feeding and egg punctures, while 88 per cent of the bolls 21 to 30 days old escaped injury and no bolls over 30 days old were destroyed by weevils.

Weevil migration, as determined by screens set up in the fields, began much earlier this year than last. The general movement began in 1924, about August 26, while the first weevils were observed on the migration screens July 17, 1925. The greatest movement of weevils from field to field took place, however, between July 24 and August 7.

#### Field Tests With Poisons

The field plat tests with poisons have been continued along the same lines discussed in our last annual report. Results obtained during 1923 and 1924 clearly indicated the comparative value of liquid and dry poisons when used at different stages of the development of the plant, and these results are given in full in South Carolina Experiment Station Bulletin No. 223. This bulletin gives the detail results obtained with molasses calcium arsenate mixture, Hill's mixture, the Florida method, and calcium arsenate dust in eight different localities in the state. It also includes results of experiments as to time and methods of applying these different poisons.

These results which are in keeping with those obtained by other research agencies throughout the south, are so clear cut and convincing that they have been accepted by our leading farmers and made the basis of the weevil control methods used generally throughout the central and eastern part of the state this year. Through the very efficient cooperation of the extension specialists and the county agents effective demonstrations of these methods of poisoning the weevil have been put on in practically all of the counties in the coastal plain area where weevils were sufficiently abundant to justify poisoning and much cotton has been saved.

The field plats with poisons this season (1925) were planned primarily to give additional information on the comparative effectiveness of early season (pre-square) and late season applications of poison. Both the molasses mixture and calcium arsenate dust were applied as pre-square applications. In some cases these early applications were followed by dusting when infestation reached ten per cent and in some cases for comparison no later season applications were made. These tests were conducted in twenty-one different fields in different sections of Florence county, and were made possible through the cooperation and assistance of the following gentlemen: A. Brunson, Pier Ashby, Stephen Taylor, F. M. Rogers, D. M. McCormick, H. Grieg, Charlie Grieg, J. W. Wallace,



E. Price, R. G. Stevenson, J. F. Robertson, and D. M. McEachin.

Mr. R. W. Moreland, who has conducted this work so effectively the past three years, continues in charge of it and was ably assisted this year by Mr. Stevenson, of the Delta Laboratories.

The exceedingly dry hot weather which caused the cotton to shed heavily during late July and early August resulted in the loss of the top crop which was protected from the weevil by poison, so that in many cases little increase in yield was obtained from the poisoned plots. The main benefit from poison this year came from the protection afforded the young bolls which were too large to shed off when the lough came but still tender enough to be damaged by the weevil. By combining some of the reliable tests conducted this year with those of other years some interesting results are obtained. These in the main confirm results previously published.

Leaf lice on cotton became epidemic in many fields in the central and eastern part of the state during July at the time weevils were increasing most rapidly in the fields. The lice were especially numerous in the areas where large amounts of calcium arsenate dust had been applied at regular intervals. Some farmers had followed a practice of dusting their cotton once a week instead of carrying out the recommendation of the experiment station and only applying poison after ten per cent of the squares were punctured. The lice seemed to increase rapidly following such heavy and regular applications of poison and in some cases caused considerable damage to the cotton. The Delta Laboratory at Tallulah, La. is making detailed and thorough study of this pest and is devising measures for its control so we have not attempted to make extensive experiments with control measures. We have, however, been interested in making some preliminary tests with nicotine dust by mixing liquid nicotine sulphate with calcium arsenate dust and making an insecticide that is effective against both lice and the weevil.

It was determined relatively early in the season (1925) that a  $2\frac{1}{4}$  per cent nicotine dust made from calcium arsenate and nicotine sulphate solution would control plant lice without producing plant injury. A little later in the season Mr. Hall found that the mixture of nicotine sulphate and calcium arsenate was fully as effective in weevil control as the calcium arsenate alone.

The experiments were not extensive but give great promise of a practicable method of controlling the plant lice and the weevil by the same application of poison.

#### Cotton Plant Investigations

When the research work looking to boll weevil control was initiated at Florence in 1923, we had in mind plant studies, physiological investigations and fertilizer experiments which we hoped would help solve the problem of producing cotton economically under boll weevil conditions.



Much of the boll weevil experimentation in the past had been confined to poison tests with the weevil, and little attention seemed to have been given the cotton plant and its part in the fight against the weevil. The farther we go in these researches the more we are convinced that a close correlation of the weevil studies with fundamental plant researches will give the final answer to this perplexing question.

Early fruiting, rapid growth and development, and early maturity are evidently the most important qualities to be sought in successful cotton production under boll weevil conditions. We have been working away along these lines for the past three years and feel encouraged to hope that eventually a reasonably abundant crop of cotton can be produced the average season with comparatively little poison, and some seasons without any poison at all. These cotton investigations are conducted at Florence, Clemson, and at the Coast Station near Summerville, on an intensive scale and fruiting studies and fertilizer effects are obtained from the cooperative tests at eight other places in the state. At Florence, Dr. Armstrong, Mr. Hall, and their assistants are making thorough-going studies of factors influencing fruiting, growth and development of the branches, buds and bolls and are conducting tests as to the effect on earliness and yield of spacing, seed treatment, pruning, time of planting, and varieties. At the Coast Station, variety studies, spacing tests, rotation experiments, and fertilizer tests are conducted. At Clemson, Professor Buie and his assistants are studying the factors influencing fruiting, shedding and earliness, and are conducting tests with varieties, cultural practices, spacing, etc., and Dr. Ludwig, of the Botany Division, is studying in a fundamental way influence of certain physical factors, including light and water, on the growth period of buds and bolls. Besides our own work along these lines, we have definite promises from Dr. O. F. Cook and his assistants, of the Bureau of Plant Industry, that the work on James Island will be closely correlated with the work of this station.

Taking it all together, we believe that our cotton work is organized and conducted in such a way as to produce the maximum results at the minimum cost to the people of the state, and we feel that if these researches can go on unmolested for a few years definite results will be obtained and improved practices developed that will be of untold value to our farmers.

#### **Length of Square and Boll Period:**

For several years we have been studying the influence of fertilizer, spacing, pruning, variety and several factors on the length of time it takes a boll to develop from bloom to open boll. These studies were continued at Clemson and at Florence this year, but the data are not yet compiled so results cannot be given. These studies were undertaken



with a view of learning all we possibly can about the fundamental factors influencing rapidity of development and earliness. The records summarized so far indicate that fertilizer, spacing, and cultural practices do not effect the length of time it takes an individual square or boll to develop. The main differences observed thus far are due to varietal variations and seasonal effects. We are continuing to study the varietal differences at both stations and hope to take advantage of these in producing earlier strains of cotton.

We were struck with the fact that both the square period and the boll period at all of our stations were several days longer during 1924 than during the previous season, 1923. A careful study of the weather conditions did not reveal the cause for this, so we made an intensive study during this summer (1925) of the influence of light and moisture on the square and boll period. We irrigated certain areas and built a slatted shade over certain plats in our field and studied individual plants in these areas and compared them with those growing in the open field. The exceedingly dry weather was very favorable for such a project and the contrasts were very marked. The results of this one season indicate that cotton plants in dry soil fruit more rapidly early in the season than those in wet soil. It takes longer for a square to develop to a bloom and longer for a boll to mature in moist soil than in dry soil. Our experiments also indicate that pulling all of the leaves off of the plants does not hasten the maturity or opening of the bolls. If plants are defoliated when the first bolls begin to open the very young bolls shed off and the older ones mature more slowly. This has a practical application in connection with army worm outbreaks.

#### **Spacing Test—1925:**

Spacing tests with cotton duplicating those of the past two years were continued this year at all three stations. At Florence, the spacings varied from unthinned cotton to one stalk every 3, 6, 9, 12, 16, 20, and 24 inches. In order to determine the best spacing where cotton was properly poisoned throughout the season and where only pre-square applications of poison were made, the same spacings were used under both conditions. The highest yield of 1783 pounds from cotton properly dusted throughout the season was obtained from the 6-inch spacing, a yield of 1746 pounds was obtained from the 9-inch spacing, followed by 1685 pounds from the 3-inch spacing, and 1590 pounds from the plats with one stalk every 16 inches.

These results are consistent with the results and recommendations for spacing the past two years.

When two pre-square applications of sweetened poison were made the highest yield of 1695 pounds per acre was obtained from the 6-inch spacing, the second highest, 1645 pounds from 9-inch spacing, followed by 1565 pounds from the unthinned cotton. One stalk every 16 inches



produced 1450 pounds, and one stalk ever 24 inches in this test produced only 1292 pounds of seed cotton per acre.

Careful fruiting records were kept of the different spacings as in the previous two years. From these records it will be observed that the closely spaced cotton put on squares much more rapidly than where the stalks had greater distance. On June 22, the unthinned cotton, the 3-inch and 6-inch spacing, all had sufficient squares to make practically two bales per acre if they had all matured; whereas, the 24-inch spacing had only enough squares to produce one-third of a bale per acre. On July 14, the unthinned, 3-inch, and 6-inch spacings had enough bolls set to produce practically a bale per acre, while the 24-inch spacing had sufficient bolls for only one-fifth of a bale per acre. At Clemson, the unthinned plats had 98,735 squares per acre on August 8, while the 8-inch spacing had 55,118, the 16-inch spacing 42,799, and the 24-inch spacing 39,341 squares per acre on the same date.

The spacing test at the Coast Station included different width rows varying from 3 feet to 5 feet, as well as different spacings in the row. This test gave very complete information as to the effect of crowding the cotton on its growth, fruiting and yield. This season (1925) the 3 1-2 foot rows with the plants spaced 10 inches apart in the drill gave the highest yield.

This increase in earliness, due to close spacing, is also shown from the yields of the first and second pickings. On August 31, when the first picking was made, the plats having one stalk every six inches, averaged 705 pounds per acre, while the plats having one stalk every sixteen inches averaged only 384 pounds per acre. On September 10, the 6-inch spacing had matured 1400 pounds per acre, while the 16-inch spacing had produced only 1016 pounds per acre.

The test of 1, 2, 3 and 4 stalks per hill at distances of 12, 18, and 24 inches was continued this year. The results are much the same as those secured last year, and check very closely with those given above for the spacing test. At the 12-inch spacing the plats with two stalks per hill produced the highest yield, 1492 pounds of seed cotton per acre, compared with 1094 pounds where one stalk was left in each hill, and 1451 pounds where there were three stalks per hill. In the 18-inch spacing, the plat with three stalks per hill gave the highest yield, 1503 pounds, compared with 1087 pounds with one stalk per hill, and 1207 pounds with four stalks per hill. In the 24-inch spacing, the difference was not very marked, but one stalk per hill produced the lowest yield, 937 pounds, compared with 1410 pounds of seed cotton per acre where there were four stalks per hill. It is observed that the highest yield in each group was obtained with the combination that averaged one stalk every six inches in the drill. This would mean about 20,000 stalks per acre. The result from all of these tests over a period of three years indicate that the best spacing is that which provides between



15,000 and 20,000 plants per acre, and it does not make very much difference whether you have one stalk every six inches, two stalks every twelve inches, or three stalks every eighteen inches, just so you have a sufficient number of stalks and have them fairly uniformly distributed over the land.

#### **Seed Treatment:**

The seed treatment test was conducted the same as in the two previous years. Comparisons of yield were made from planting seed delinted with sulphuric acid, seed delinted at the oil mill, seed rolled in soda, and normal seed as they came from the gin.

Plantings of seed delinted with sulphuric acid made 1712 pounds of seed cotton per acre, as compared with 1708 pounds from machine delinted seed, 1613 pounds from undelinted seed, and 1576 pounds from seed rolled in soda.

Almost without exception, the plants on the acid-delinted plots have begun blooming first, and continued fruiting most rapidly early in the season. This is clearly indicated by the number of blooms on plants from delinted seed during the first three weeks of fruiting in 1925, as compared with the number of blooms on plants from ordinary seed. In the case of the delinted seed, 100 plants had 712 blooms, while the 100 plants from undelinted seed had only 646 blooms for the same period. The total production of blooms was not greatly different from the two lots, but the delinted seed gave a considerably earlier crop and a greater total yield.

#### **Time of Planting:**

We have been making an effort to determine the effect of time of planting cotton on earliness, boll weevil development and total yield at Florence. Plantings every seven days from the middle of March to May 10, have been made during the past three years. Early plantings proved decidedly the best this year, the three plantings in March yielding over 1800 pounds of seed cotton per acre, as compared to approximately 1400 pounds per acre for each planting after April 14. For the past three years the highest average yields have been made from plantings the first week in April. In 1924, there was not much difference in the yields or earliness of the plots planted between March 23 and April 14, but slightly higher yields were obtained from the April 6th planting. The results were more definitely in favor of the early April planting during 1923.

Tests at Clemson indicate that plantings made between the 10th and 25th of April give best results the average season. Experiments have been conducted here during the past two years to determine the rapidity of fruiting of cotton planted at regular intervals through the season. Without exception, the first blooms and the heaviest fruiting have



been obtained from the first plantings, which have also matured a larger percentage of the total crop. No great difference in fruiting was observed, however, between the extremely early plantings, and those of two weeks later. There appears to be a period during which the planting may be slightly delayed without materially delaying the fruiting of cotton. That is, plants from seed planted at intervals of two weeks will commence blooming at approximately one week's difference in time. This would indicate that planting may be somewhat delayed up to the latter part of April, without seriously delaying the crop.

#### **Time of Applying Soda to Cotton:**

During the past three years we have been conducting experiments in an effort to learn when it is the best time to apply nitrate of soda or other quickly available nitrates to cotton when grown under boll weevil conditions. At Florence, this year (1925) we have conducted a test in which in addition to a mixed fertilizer 100 pounds of soda was applied to cotton at different times. In one case 50 pounds of soda was applied under the cotton, and 50 pounds at chopping time; in another, 100 pounds under the cotton, in the third 100 pounds at chopping time, and in the fourth, 50 pounds at chopping time, and 50 pound at the appearance of first blooms. As a check the mixed fertilizer alone was used.

At the Pee Dee Experiment Station, the best results were obtained when 50 pounds of soda were applied at chopping time and 50 pounds when the first blooms were observed. More striking results were obtained from the use of soda in a similar test conducted on a deep sandy soil on a farm near Florence. The yield data obtained at Clemson over a period of several years confirm those from Florence and indicate that the best results are obtained the average season by applying the top dresser after chopping. Some season applications later than this have paid well.

#### **Varieties:**

There are new varieties of cotton being introduced and advertised for sale from year to year. The responsibility for testing these and measuring their value and productiveness as compared with certain standard varieties whose values have already been proven falls to the lot of the experiment stations. The results of our variety tests are therefore not only of interest, but are of great value to the farmers of South Carolina.

These tests are conducted at Clemson and at the sub-stations at Florence and Summerville. There were 16 varieties in the test at the Coast Station, 18 in the tests at the Pee Dee Station and 22 in the test at the main station at Clemson. The extreme drought here prevented the test at Clemson from being of any special value this sea-



son, but yields obtained were in line with the averages reported last year, Cleveland leading, and Cook being a close second.

At Florence the test was run in two series. One series was poisoned throughout the season to protect the cotton against the weevil, and the other series was only poisoned with two early applications.

Of the short staple cottons dusted throughout the season, the highest yield of 1831 pounds per acre, was obtained from Woolsey's Cleveland, Dixie Triumph was second, with 1806 pounds per acre, and Humphrey Coker Cleveland was third with 1778 pounds per acre.

Delphos number 6102 with 1724 pounds per acre, was the highest yielding long staple cotton, followed by Salisbury, with a yield of 1654 pounds per acre, and Carolina Foster third with a yield of 1631 pounds per acre.

In the test with only two early applications of poison, Dixie Triumph was first among short staple varieties, with 1650 pounds per acre, Bauknight Cleveland second with 1492 pounds per acre, followed by Woolsey's Cleveland and J. E. Wannamaker Cleveland, with 1462 pounds per acre.

Of the long staple varieties, similar treated, Delphos number 6102 was first with 1646 pounds per acre, Lightning Express second with 1537 pounds per acre, and Humco Webber Elite third with 1520 pounds per acre.

The three year averages at Florence show Humco Cleveland, Wannamaker Cleveland, Marrett Cleveland, and Coker Cleveland No. 4 leading the short staple varieties with the following average yields: 1803 1742, 1708, 1702. Carolina Foster, Delphos, Lightning Express, and Webber 49 led the long staple varieties the three year averages being 1694, 1657, 1620, and 1590, respectively.

Of the 16 varieties tested at the Coast Station, Woolsey's Cleveland ranked first among the short staple varieties, with a yield of 1535 pounds of seed cotton per acre, and Dixie Triumph second with a yield of 1507 pounds, while Coker's Lightning Express out-yielded all of the long staple varieties, producing 1552 pounds of seed cotton per acre. King stood at the bottom in this test, with a yield of 1035 pounds.

The detail fruiting records and growth studies of all varieties as reporter last year are being continued, and we hope to work these up later for publication in bulletin form.

### Fertilizer and Rotation Studies

Experiments to determine the most economic fertilizer practices have been continued by the Agronomy Division the past year. The yields have in almost every case been very low, especially in the Piedmont. This was due primarily to the extreme drouth from which the upper part of the state suffered throughout the growing season.

Fertilizer experiments are conducted on the station farm at the Col.



lege, on the sub-stations at Florence and Summerville, and also on representative soil types of the various sections of the state.

The source of material to use for side applications is a matter in which every farmer is concerned. The Agronomy Division has been conducting experiments for a number of years to determine the relative efficiency of the more common nitrogen carriers when applied to cotton as a side dressing.

These experiments indicate that there was practically no difference in the yield of cotton produced by applications of nitrate of soda and sulphate of ammonia. This would indicate that these two materials are of practically the same relative efficiency when applied to cotton in equivalent amounts. These two materials proved better than the other sources tested. The effect on total yield of the time of applying the top dresser to cotton is of particular interest to farmers of South Carolina and has already been referred to in this report.

In order to determine the most economic rate of application of soda as topdresser, tests have been conducted in which the soda has been applied in amounts varying by 50 pounds increments from none to 300 pounds per acre, in addition to a regular application of complete fertilizer applied before planting. The average yield of seed cotton per acre for the past three years where different amounts of soda were used as a top dresser indicate that 200 pounds of soda per acre gave the most profitable yield.

#### **Fertilizer Experiments At Branch Stations**

The fertilizer experiments conducted in cooperation with the two branch stations, Pee Dee Station at Florence, and Coast Station at Summerville, have been continued along the permanent plan outlined some years ago. The tests at Florence include rotation studies, best formulae for various field crops, and sources of materials for use as fertilizer.

The value of a systematic soil-building rotation has been admirably demonstrated by the experiments conducted at Florence. A very comprehensive fertilizer and rotation study was begun there 1914. One series of plots has been planted to cotton continuously since that date, while three other series have been rotated in cotton, corn, oats and peas. By comparing the corresponding plots in each of the two cropping systems employed, it is possible to determine the relative value of the rotation in terms of fertilizer. The yields on the fertilized plots of the continuous series, and the unfertilized plots of the rotation series, have given for several years very nearly the same yield per acre, which means that for cotton production this rotation maintains the fertility as well as 1000 pounds of an 8-4-4 applied to soil planted continuously to cotton.



This proves clearly the value of rotation in producing economic yields of crops, and also the inadvisability of attempting to grow cotton continuously on the same soil over a long period of years, even though heavy applications of fertilizer are made annually. In other words, a combination of a systematic rotation and adequate fertilization are needed to produce cotton economically.

The tests conducted on the Coast Station at Summerville, are designed to give information on the best fertilizer practices, such as time of application, and best kinds of fertilizer to use in connection with soil-improving crops.

### Cooperative Fertilizer Tests

The cooperative fertilizer tests which we are conducting on representative soil types throughout the state are worthy of special attention. Results obtained on one soil type are not necessarily applicable to other soil types, even in the same vicinity. It is, therefore, necessary to conduct experiments on typical soils of each section, if reliable information as to the needs of the soils is to be obtained.

The Agronomy Division has eight of these tests under way at the present time. The general plan is a three-year rotation consisting of cotton, corn, oats, and peas, each crop being planted every year.

The object of the experiments is to determine the percentage of each element in a complete fertilizer which will give best results on general field crops, and also to determine the most profitable rate of application of complete fertilizer.

These experiments have shown certain fundamental facts underlying the proper use of fertilizer for the field crops planted. For instance, it has been found that in every case the most necessary fertilizing element for all crops is nitrogen. This has been particularly true with corn and the small grains.

The results indicate that the application of phosphorus and potash to corn and oats may be considerably reduced—if not entirely eliminated—when these crops are planted in a regular rotation following cotton which has been liberally fertilized with complete fertilizer.

These cooperative experiments afford a point of contact between the college and the general agricultural public. Wherever possible, the plots are located on, or near a main road, thereby being readily accessible to anyone interested. As each individual plot is plainly labelled with the rate and kind of fertilizer applied, it is possible for anyone to study at first hand the effect of the various fertilizer treatments.

### RESEARCH WORK IN AGRICULTURAL ECONOMICS

Realizing that many cropping systems and farm practices which seem best for the individual crop and for the present conditions, are unsound and uneconomic from the standpoint of our permanent advancement, we



have for several years kept accurate records of all the operations and costs involved in producing the various crops in the different fields on the Experiment Station farms. A careful study of these records from year to year has shown the excessive cost and poor economy of certain practices, and has indicated methods by which improvements could be made and cost of production lowered. During 1922, we took up with the Bureau of Agricultural Economics, of the United States Department of Agriculture, the matter of cooperative work in Farm Management and Cost of Production, and perfected an agreement by which work along this line could be undertaken jointly by the Department and the College, each paying one-half the cost. With the passage of the Purnell Act by the National Congress in February 1925, additional funds were made available to the several experiment stations for enlarging and developing their research work in Agricultural Economics. With the added facilities provided in this way, the work in this state has been materially expanded, and it is our plan to develop still further as time goes on.

The object in research work of this nature is to provide an economic foundation for farm production and marketing through investigations of general economic problems, such as cost of production, price movements, tenancy, taxation, and credit.

At the present time we are conducting this kind of research along four distinct lines—farm management, marketing, land economics, and finance. We feel that under these headings can be classed practically all of the economic problems influencing the farm and the farmer. In making a combined farm management and marketing survey in the Greenville trade territory the work was organized along the three following lines: (1) careful study of the better paying farms and the reasons for their profitableness, (2) a cost of production investigation to show the relative efficiency and profitableness of all farm enterprises for the purpose of determining the best combinations, and (3) a careful marketing analysis to determine the extent, potentialities and characteristics of local and outside markets for farm products of all kinds. It is our plan to co-ordinate our various lines of research in a similar way in other parts of the state as facilities and funds permit. The field work of three projects has about been completed and data are now being worked up for publication.

### **Farm Management**

Weather, pests, and other natural influences determine the cost of producing individual crops, and to some extent, the yearly outcome of the farm business. Yet when very similar farms across the road from each other suffering the same damage from weather and insect pests make very different profits, it is evident that the various economic factors concerning the management are of great importance. The varia-



tions in income on similar farms with similar damage from natural agencies has been known to vary several hundred per cent, and from this we conclude that man and management are more important than land, labor and capital, the factors which man controls, more powerful also in the long run than the natural agencies with which he contends.

In our Farm Management studies we aim to find out such facts as form a sound basis for farm production programs in the many communities of our state. We believe that by such studies we can determine the most efficient combinations of the factors involved in the economic production of crops.

**The Farm Management Study in Anderson County:** Farm organization and cost of production records were obtained for 1922 on 333 farms in Anderson county, in cooperation with the Federal Bureau of Agricultural Economics, which is appropriating half the expenses for the work. These records were published in South Carolina Experiment Station Bulletin No. 221. The fire destroyed the records gathered for 1923 on the same farms, but aside from this set-back, work has progressed satisfactorily, and records will soon be completed for 1924-1925. Complete records of organization and cost of production are obtained, using a field book of twenty-two pages for each farm. The tentative results of the last two years of work check fairly closely with those of the 1922 investigation. A summary for three years will be published soon.

A study of the data secured in these surveys reveals certain important facts as to economy in production. The average yield of lint cotton on all of these farms was 227 pounds of lint per acre, while the average on 26 of the best farms was 291 pounds per acre. On the average farm each work animal performed 978 hours of productive work per year, and each man performed 1375 hours of productive work, while in the 26 best farms studied each work animal averaged 1110 hours and each man 1560 hours of productive work. On the average farm it costs 23 cents per pound to produce cotton, while on the best farms it costs only 15.3 cents. The average cost of producing hay on all the farms was \$19.03 per ton, while the average on the best farms was \$14.00 per ton. The total receipts on the average farm were \$2,594.00, and the total receipts on the best farms were \$4,142.00, while the total expenses on the average farms were \$2,180.00, and on the best farms only \$2,237.00. The labor income on the average farm was minus \$502.00, and on the best farm \$943.00. The expenses per \$100.00 of income in one case was \$84.00, and in the other \$54.00. It is especially interesting to note that while the large majority of these farmers are not making living expenses, 15 per cent of them are making an outstanding success at farming, even during these hard times.

**Special Farm Management Studies:** Special farm management studies in cooperation with the Federal Bureau of Agricultural Economics and the agricultural teachers in the high schools in South Carolina were



begun last year. The teachers assist in obtaining field records, and the field records are summarized into reports on the different communities. Such a report for the crop year 1923 has just been completed for the Fountain Inn community of Greenville county.

The cooperative work with the teachers in Lexington and neighboring counties under Mr. B. A. Russell's leadership has progressed to such an extent that records of several communities are being worked up together into a report on economic conditions in Central South Carolina as based upon approximately 175 farms in this region. It is intended to publish the report and to give recommendations regarding efficient farm production and marketing practices applicable to this part of the state.

**Cost of Producing Peaches:** In the summer of 1925, we perfected an arrangement with the Federal Bureau of Agricultural Economics whereby a survey of the commercial peach industry and a determination of cost of producing peaches could be made. The study was undertaken during the summer of 1925, the Bureau of Agricultural Economics furnishing the services of Mr. A. P. Brodell for the field work. This is a part of a comprehensive study covering the peach industry of the United States, the principal objectives of which are the determination of the relative efficiency of production of peaches in different parts of the country, and to determine the sizes of the various markets for peaches, and the relative economy with which the crop may be carried from producer to consumer.

The South Carolina records were obtained in the McBee, Spartanburg, Greenville, and Chesterfield areas, and include most of the commercial orchards.

### Marketing

Agricultural commodities pass through many hands in the route from producer on the farm to final consumers in our cities and towns. There are at least nine or ten services performed in the handling of commodities after leaving the farm. For many years ignorance of what happened between producer and consumer led many people to speak in rather unpleasant terms about "what happened in the dark." While a great deal of light has been thrown on the marketing question showing that distinct services are performed by railroads, wholesalers, and retailers, much needs to be done in working out more efficient marketing practices for most farm commodities. Two of our marketing projects are planned with the purpose of investigating these phases of the marketing problems.

Another phase of the marketing problem, and one which forms a necessary part of the basis for a farm program, is that of determining the extent and potentialities of local markets for local produce. This is accomplished by studying imports, exports and local production of farm products, and with these facts available there is a basis for accurate statements regarding the capacity of markets for such commodities



as can be economically produced. The investigation in the Greenville trade territory is being worked out along this line. This survey is three-fold in nature. One phase has as its objective the determination of the net import of agricultural products, their source or origin and seasonal supply. This will point out to farmers in the area the potentialities of the local market for feed, vegetables, truck crops, animals and animal products. Another phase of the survey, is a consumer-demand study of a large number of families in the city of Greenville. This has shown the preferences for native grown versus imported farm products—the consumption per capita of farm products for which there are possibilities in local production, the source from which the food supply is secured—and many other interesting and valuable facts. The third phase of the survey is a cost of production study covering the products for which a large net import was found and for which there seemed to be room for expansion.

This project is still in progress, and only a few tentative results can be given at this time. Mr. F. H. Robinson, with an assistant, obtained most of the information in imports and exports of the region. The other phases of the study, such as cost of producing milk and eggs, are still under way.

The consumer-demand study, the results of which were secured through a canvass of housekeepers in the city, gives some interesting and surprising information. About five per cent of the fresh farm produce is supplied at the curb market, thirty-five per cent is brought in by wagons and trucks, and either sold directly to the consumer, or to retailers, and sixty per cent is brought in by rail.

A large part of that trucked in originates in North Carolina and comes chiefly in the fall season. The winter and spring supply coming by express and freight is largely California and Florida produce. The summer supply is principally of local origin.

The largest single import, both in value and in bulk, was various forms of feed. Although hay is bulky and low in value per unit of weight, it is imported from New York, Vermont, New Hampshire, and some from Canada. The concentrates originate in the corn and wheat belts and adjacent states. These long hauls have their effect in increasing the feed bill of the area and \$139,090.00 was paid as total freight charge on feed imports of hay, oats, corn, and mixed feeds, valued at \$1,028.447.

Although the area is considered rather highly specialized to cotton, 85 per cent of the poultry and 42 per cent of the eggs consumed in the county are produced within a radius of 25 to 30 miles of Greenville.

Information similar to that presented above, coupled with detailed cost of production data on the crops which seem to merit increased acreages, can be used by county agents and other agricultural workers in making an agricultural program in advising farmers concerning the com-



parative profit from various enterprises. In areas surrounding rapidly growing cities there is usually a lag on the part of the farmers in meeting local demand for fresh farm produce in the form of vegetables, fruits, poultry and eggs. Such a survey is the only means by which the deficit can be even approximately determined, and an economic production and marketing program laid out.

### Land Economics

**Land Prices:** One of the heavy burdens hanging over our farmers today is the result of the land craze of 1920. Many farmers bought at unusually high prices far above the normal producing capacity of the land. By studying land prices more carefully, noting the lag of land prices after cotton prices and the cyclical movement in land values, it is possible to avoid making mistakes like so many did during the World War. The use of land prices together with price data on commodities, forms the basis of fairly accurate forecasting.

An arrangement with the Land Economic Division of the Federal Bureau of Agricultural Economics was made in May, 1925, whereby land prices could be assembled from all deeds of sale for approximately 75 years in one county in South Carolina. The Division of Land Economics contributed half the expense in making this investigation. Mr. B. A. Russell was placed in charge of the field end, and was given one assistant most of the time. The field data are now complete and the application of the material in making correlations of different kinds, such as with the price of cotton, is in process.

### Finance

**Comparative advantages of various forms of intermediate and long-time credit:** The object of this study is to discover the kind of credit commonly relied upon by farmers for long-time and intermediate needs, and show their relative efficiency by means of a comparison of weighted average interest rates paid for each class of credit used.

The Division of Taxation and Finance of the Federal Bureau of Agricultural Economics agreed to cooperate with us in this project and in the summer of 1925 several thousand questionnaires covering the credit problems of farmers were mailed out. The government has allowed us to use the frank in our mail questionnaire work. It will also assist us some in the field in visiting bankers and other ways. The study is being pursued in the different agricultural areas of South Carolina, such as cotton, tobacco, and truck regions. These representative regions are also locations for our special Farm Management Studies, and much information along credit lines is being obtained in the regular farm records.

**Problems in Taxation:** Problems of taxation are confronting all of our people and the question of taxes on farm property is especially acute



at this time. Several tax studies have been organized with a view of accumulating as much information as is possible on this important question. The material on land values already gathered in connection with the land price project referred to above will be used.

Dr. W. H. Mills, who teaches Rural Sociology in the College, is devoting all of his time during the first half of the present fiscal year (1925-26) to a study of the tax situation, and is cooperating with the state tax commission and the various committees and organizations working along the line in this state. The principal purpose of this study is not tax reform but it is intended to get at the facts with reference to taxation and make these available for our people so that they may serve as a basis for correct tax legislation.

### INSECT PESTS

Insect pests and plant diseases constitute a great menace to crop production and to agriculture in general. Insects attack all kinds of crops and plants and in many cases the damage which they cause makes the difference between success and failure. We are constantly being asked why pests are more abundant now than they were some years back. When we realize, however, that 75 per cent of the injurious insects that we have to contend with have come in from other countries, the answer to this question is evident. As would be expected the most destructive pests are the ones that have been imported from other countries—the Mexican bean beetle, the San Jose scale, and the boll weevil being conspicuous examples.

If adequate protection against insect enemies is to be provided it is necessary for Entomological specialists to keep informed on insect activity throughout the state and nation. While the majority of our most destructive insect pests come in from other countries, there are many instances where insects which have been with us for a long time but have never been considered serious menaces suddenly develop in such proportions as to become pests. Influence of weather and climatic conditions on potential insect enemies must be kept constantly in mind. A good illustration of the injury which may be done by insects not commonly considered harmful can be found in the tremendous damage that was done to soybeans and velvet beans in the south-central part of the state during October of this year. The outbreak of leaf devouring worms in the soybean fields is estimated by the soybean specialists to have caused the growers a loss of between three and four hundred thousand dollars in the short time of four weeks. From careful investigations made in the field it is evident that these worms, which are larvae of a number of different moths representing several species of insects, are largely forms that are native here but do not ordinarily become destructive. One of the unfortunate features of this epidemic was the fact that no control measures had been worked out for these



particular pests. They have never been considered serious to crops and no one has tested poisons or other control methods as a means of keeping them in check. Of course as soon as the epidemic appeared one of our research assistants was sent into the field to test out the different poisons and different methods of poisoning, and we hope to be prepared against such a contingency in the future. This serves, however, as a striking example of how insects not usually considered destructive may become epidemic and do a tremendous amount of damage before control measures can be devised.

Our Entomologists, then, must not only devote themselves to a study of insects that are known to be destructive and endeavor to inform themselves as to ones that are always present and may become destructive, but they must devise and enforce quarantine measures to keep other and more destructive pests from being brought into the state.

### **The Mexican Bean Beetle**

One of the most important research projects which the Entomology Division has carried during the past two years has been the intensive study of the Mexican Bean Beetle made by Mr. C. O. Eddy. The Bean Beetle came into the state three years ago and during the past two seasons has developed to destructive proportions in the Piedmont section of the state. It has, in fact, become one of the most important insect pests that we have, and the fact that it attacks a wide variety of host plants—including soybeans and cowpeas—makes its appearance somewhat alarming.

All of the detailed records of the research work with this pest in 1924 were lost in the fire which destroyed the Agricultural building in April. If it had not been for this loss, we would have published a bulletin by this time giving a full description of the life history and habits and the control measures of this insect. The work this season, however, has furnished a great deal of detailed information as to the life history and habits of this pest, and it is hoped that this can be shaped up for publication at an early date. Our experiments indicate that the bean beetle is readily controlled by thorough spraying with arsenical poisons.

### **Insecticide Studies**

Control of almost all of our insect enemies is dependent on poisons. We must of course use poisons which will destroy the pest without injuring the plant. As chemical and physical sciences advance new substances are being produced which seem to have possibilities as insecticides. In order to keep abreast of the times and learn, if possible, simpler and better methods of controlling these insect pests, we have made intensive study during the past few years of insecticides and insecticide materials. This work, which constitutes the cooperative project engaged in by the



Chemistry Division and the Division of Entomology, is being prosecuted along the following three lines: (1) the study of insecticides in common use, (2) the investigations of new insecticides, and (3) the investigation of new insecticide combinations and materials. We had developed a splendid insecticide laboratory in the basement of the Agricultural hall and were making considerable progress in these investigations. All of this equipment, along with the data which had been secured, were lost, however, when this building was destroyed by fire. Since the fire, through the courtesy of Dr. Brackett, Head of the Chemistry Department, a temporary insecticide laboratory has been set up in the basement of the Chemistry building, and this important work continued. This is a research problem of fundamental importance and is being attacked in a thorough-going way. Large numbers of combinations of chemicals have been made under varying chemical and physical conditions and the toxicity of these is being carefully studied. Mr. J. H. Mitchell, the Research Chemist, is making a chemical study of all of them. Facilities will be provided in the new Agricultural building for continuing this project in a satisfactory way.

#### Entomological Field Stations

As the insect problems of the state are readily associated with crops and with regions we have adopted a plan of establishing field laboratories at places where certain pests can best be studied. During the spring of 1925, Mr. C. B. Nickles was stationed in Charleston county for the purpose of studying the insects injurious to crops in that region. He made observations and experiments with several of the more important insects affecting truck crops, and devoted particular attention to the pea aphid which is a destructive pest of field peas every year in that area.

During the past few years we have been greatly impressed with the large amount of injury which our corn crop suffers every year from insects. The bill bug, bud worm, corn stalk borer, and other common insects of corn have become so abundant in certain sections that they are the limiting factor in corn production. We have organized a project on corn insects and Mr. O. L. Cartwright, a young man of excellent entomological training from Ohio State University, has been employed to prosecute this work, and we have stationed him in Columbia, through cooperation with Dr. Luginbill, of the Federal Bureau of Entomology, who has his laboratories on the campus of the University of South Carolina.

Professor Franklin Sherman, who came to us from North Carolina, and is the active head of the Entomological Research work, has already made some progress in organizing an entomological and zoological survey of the state. He feels that it is very necessary that we have a thorough knowledge of the insects prevalent in all the regions of the



state as a background for our more intensive research work with the various pests. Professor Sherman states that the number of species of injurious insects is increasing. This is not only because new insect pests are being brought in, but because species which were already present and only potentially destructive have become actively destructive to our crops.

Owing to the absence of boll weevils in the Piedmont section this season (1925) this division was unable to make any progress with the research work along this line, and confined its activities on this project to cooperation with the division of Boll Weevil Control, at Florence.

### PLANT DISEASES

Plant diseases, like insect pests, take a much larger toll of our crops each year than is commonly realized. The report of the Plant Disease Survey of the United States Department of Agriculture, compiled in cooperation with this office, shows that the average loss caused by fungus and bacterial diseases in South Carolina amounts to \$15,000,000 to \$20,000,000 annually. This is twice the amount appropriated by our legislature for all purposes and is nearly three hundred times the amount appropriated annually for agricultural research work. These destructive diseases of plants, like the diseases of man and animals, yield readily to scientific treatment when the causes are known and the habits and behavior of the organisms which cause them are understood. As a result of the research work of this experiment station, control measures have been devised for cotton anthracnose, the angular leaf spot of cotton, cotton wilt, and other destructive diseases formerly causing from three to five million dollars loss each year in South Carolina alone.

The pathological laboratories which provide facilities for this work were located in the Agricultural building, and when this building was destroyed by fire in April all the original records and data accumulated over a period of years were lost and laboratory work had to be temporarily discontinued. The office and field phases of the work have been continued, however, and with the completion of the new building the laboratory investigations will be taken up again.

#### Plant Disease Survey

The annual plant disease survey, conducted in cooperation with the Bureau of Plant Industry, of the United State Department of Agriculture, has been carried out as usual. Our part consists in observing and reporting cases of plant disease in this state, and that of the national survey consists in correlating these reports with those from other states and making frequent reports back to us. We are thus enabled to keep in close touch with plant disease conditions over the country and to pass on to South Carolina farmers information along this line.



### Disease Investigations

The work on anthracnose of cotton has been written up and published as Bulletin No. 222, of this station. There were some features of the work which we wished to follow up further but the fire destroyed the samples of seed which we had in storage and thus, temporarily at least, terminated the work for us. Our results have verified the earlier finding that infected seed become clean if stored long enough and have proved that the death of the fungus is due to something other than simple drying. They also show that delinting the seed with strong sulphuric acid is a valuable aid in reducing infection but that it will not eliminate it.

The work on the bacterial disease of garden peas has been continued as indicated in last year's report. Since this disease was first discovered in the state it has caused serious loss for two consecutive seasons. The results of our work to date have been incorporated in a paper which will appear soon in a technical journal.

The wild onion disease mentioned in last year's report has been kept under observation and a series of inoculations carried out. A peculiar development is that part of the diseased plants brought to the greenhouse and potted seem to have recovered. Evidence to date indicates that while the disease is very destructive in the field it is slow in getting started.

### EXPERIMENTS WITH FRUIT AND VEGETABLES

Fruits and vegetables, always important from the standpoint of the home orchard and garden, are assuming additional prominence in the agriculture of the state through the rapid development of commercial orchards and trucking areas in different sections of South Carolina. The areas planted to apples, peaches, and grapes in the Piedmont section—peaches, dewberries and asparagus in the sand hill section—and lettuce, tomatoes, potatoes, spinach, and cabbage in the trucking area along the coast, are rapidly increasing from year to year.

The research work of the Horticultural Division of the Experiment Station is planned with a view of accumulating additional information as to the best varieties to plant, the best fertilizer to use, and the best cultural practices to follow in producing the largest yields and most desirable quality of the great variety of fruit and vegetables that can be grown in this state.

The cooperative fertilizer experiments with peaches have been continued at McBee in the sand hills, and at Grambling in the Piedmont section. This work has been under way for only three seasons but valuable information as to the plant food requirements is already being obtained. Nitrogen seems to be the most important element in the fertilizer as vigor of trees and yield and size of fruit increase with increased



application of nitrogen. Heavy applications of nitrogen, however, result in delayed maturity of the fruit.

Grapes are yearly becoming of more importance in the entire state, and in order to be in a position to advise our growers as to the best varieties to plant we are conducting a test with 125 varieties. Fifty-five of these have borne heavy crops two years, the other seventy varieties will bear a heavy crop next year. Three new varieties stand out in this test as being worthy of further trial; these are the Bailey, Extra, and Armalga.

The spring Irish potato crop is one of the most important truck crops in the state. Heavy applications of fertilizer are required to produce maximum yields, one ton per acre being about the average amount applied. This fact makes fertilizer problems of much importance in connection with this crop. Tests have been conducted three years at Clemson and Summerville, and four years at Florence. The average results thus far indicate that at Clemson a 7-5-5, at Florence a 7-5-9, and at Summerville a 7-7-5 give the highest yields.

The source of seed test with Irish potatoes was continued at all three stations the past year. Seed from two additional sources was obtained, making a total of ten which we are now testing. Valuable results are being obtained and this test will be continued another year or two before final report is made on it.

Variety tests of apples, peaches, strawberries, and vegetables are being continued. We try to obtain all new varieties of fruits and vegetables as soon as they are listed by nurseries, seedmen, and individuals who make specialties of breeding new strains. We are making an effort to obtain a peach that will ripen seven to ten days after the Elberta and that can be grown in a commercial way. To this end we are testing as many varieties as we can obtain that ripen after the standard commercial varieties. At the present time we have sixty-five varieties of peaches. We also have at the station grounds a number of peach varieties obtained from foreign countries which may become adapted to our state.

We are testing a number of varieties of dewberries, raspberries, and blackberries. At present the Van Fleet raspberry and the Young dewberry are giving good results. Both are vigorous growers, disease resistant and prolific.

By cooperating with the Office of Foreign Seed and Plant Introduction of the United States Department of Agriculture, we each year receive varieties of foreign fruits, vegetables, and ornamental plants. A plot of ground is set aside for testing these new importations, and when a desirable variety is found it is propagated and distributed for further tests in different parts of the state.



## EXPERIMENTS WITH LIVESTOCK

The utilization of home grown feeds by home grown livestock is becoming a popular slogan in the live-at-home program of the Southern farmer. Our most successful farmers are not only looking to the production of meat for their own needs, but are utilizing cattle, sheep, and hogs to realize on their pastures to the maximum and consume the surplus roughage and grain produced on the farm. This not only makes for a better community program, but it helps supply the local demand for meat, thus furnishing the consumer a better product at a lower cost, and saving to the farmer and consumer the heavy transportation charges on this class of food.

The livestock program of this station is based on:

1. The economical production of feeds.
2. An economical utilization of these feeds
3. The breeding of animals which are best adapted to our section.

Each year more acreage is being devoted to feed crops, particularly for hogs. Permanent pastures are also being improved and farmers in general are manifesting more interest in animal production. This is true of swine, and particularly of sheep, during the past two years, especially there has been a great increase in the sheep industry.

There are many new feeds coming on the market, some of which are of such practical importance as to entitle them to careful trials from the experiment stations. Some such feeds are peanut meal, soybeans and velvet beans in their various forms. There are also many unsolved problems as to the influence of feeds such as soy beans and velvet beans on the quality of meat.

The station is solving these problems as rapidly as time and funds will permit. Owing to the dry weather the forage crop work for the year 1925 has been greatly hampered. The soybeans in most cases made very unsatisfactory yields. The station at present has about thirty acres in one-acre lots which are being used in forage tests and hogging off experiments, and much valuable information is gradually being accumulated from these.

Soybean forage continued to give excellent results when compared with other kinds of forage, or with balanced rations in dry lot. In one test completed since the last report was published, one lot of pigs on soybean forage and a limited corn ration produced pork at cost of \$5.73 per 100 pounds gain, while a similar number in dry lot cost \$10.02 per 100 pounds gain.

The tests comparing various protein rich feeds from plant and animal sources were repeated this year. Tankage and fish meal, (animal proteins) have been given good results as supplements to corn, but these feeds are usually scarce or high in price. Tests have been conducted to determine whether or not the cost of producing pork can be reduced by



the use of common vegetable proteins such as soybean meal, peanut meal, and peanut feed when used as the sole supplement to corn or in combinations with the high priced animal proteins.

A combination of soybean meal and fish meal in equal parts, when added to corn in sufficient amounts to balance the ration, gave the best returns. A combination of peanut feed and fish meal with corn ranked second. In all cases where a combination of plant and animal protein was used the gains were more rapid and economical than where either tankage or fish meal supplied all of the protein. These results check very closely with a similar test reported in our last annual report.

At the Pee Dee Experiment Station the tests with hogging down various forage crops were repeated this year. Peanut forage, plus a limited corn ration; peanut forage alone; and soybeans, plus two per cent corn ration produced very satisfactory results and cheap gains.

The test to determine the cost of maintaining beef cattle during the winter was repeated at the Coast Station this year. This test was similar to the one last year, except that crab grass hay was added to the ration. The purebred Aberdeen-Angus herd was used in this test which continued from December 3 to February 26. The total feed cost per animal for the winter was \$15.50 for the mature cows, \$12.38 for the two-year old heifers, and \$9.98 for the one-year old heifers.

Considerable work has been done in the Western and Central states in feeding lambs, where corn, barley, or some of the grain sorghums make up the bulk of the ration. Very little work has been done in the South, where protein rich feeds are relatively cheap compared with the grains. Tests have been completed comparing the value of velvet beans, cotton seed meal, soybean meal and peanut meal when fed with corn, corn silage, and grass hay. The lambs receiving shelled corn and cotton seed meal made the fastest gains, followed by those receiving soybean meal, but the most economical gains were made by the lambs on cotton seed meal, with velvet beans second.

In addition to the experimental work with feeds for different classes of livestock, the Animal Husbandry Division has for the past few years been conducting breeding experiments with hogs. As a result of these experiments the question "Can good hogs be produced in South Carolina?", was answered in the affirmative by the showing of our herd of Berkshires. This herd was produced at Clemson from one boar and one sow, purchased in 1922 from Parker Brothers, Niles, Michigan.

The show herd consisting of 27 animals was on the show circuit for four weeks, and is believed to have competed with the best Berkshires from every section of the United States. The herd was first shown at the National Swine Show in Peoria, Illinois, during the week of September 28 to October 3, winning 35 premiums including the reserve grand champion boar and the senior and grand champion sow. This herd won more prizes than any other herd of any breed at this show. It was also a unique



showing in that it was the first herd of merit to be the product of a single boar and a single sow. At the Southeastern Fair, Atlanta, Ga., 12 prizes were won by this herd, including the senior champion boar, junior champion boar, senior champion sow, junior champion sow, grand champion sow. We were limited in the number of prizes at this fair due to a ruling which limits each herd to two entries in any particular class.

At the South Carolina State Fair the herd had the same competition as at the National Swine Show in the Sycamore Farms Herd, from Douglassville, Penn., so the winning were much the same as at the National Swine Show. Here our herd was also awarded the silver trophy given by the Southern Berkshire Congress to the best herd of Berkshires bred and shown by exhibitor.

### EXPERIMENTS WITH DAIRY CATTLE

Dairying continues to take first place in our livestock development. This is as it should be because we are still far short of producing sufficient dairy products to meet the local needs. South Carolina continues to import about \$10,000,000.00 worth of dairy products annually. If we are to develop a well rounded agriculture and produce sufficient milk and butter to meet our needs we must increase our present production by about one hundred per cent.

The research work of the Dairy Division of the Experiment Station continues to center around economical production. The factors which influence profitable production are: (1) the animal, (2) the feed, and (3) the environment. Our experiments are largely with methods of breeding and with methods of feeding dairy animals, and progress is being made along both of these lines.

The official testing of dairy cattle is one of the most important projects we are conducting at the present time. This consists of keeping accurate daily records of the milk and butter fat production of certain cows in our herd at Clemson College, and of individuals in the herds of some of the most progressive dairymen of the state. All of this work is supervised and managed from Clemson College, and all of the records are certified to by the Chief of the Dairy Division of the Experiment Station. The actual testing of the herds in the state is done by men employed by this office for the various cattle clubs and is paid for by the owners of the herds tested. This work has been carried on in nineteen herds in the state this year.

Several outstanding records have been made in the state this year. The most important record was the World's Senior two-year Jersey record of 13,303 pounds of milk, and 850.81 pounds of butter fat in one year in AA class, made by Sensation's Mikado's Millie, owned by Mr. Fred H. Young, of Timmons ville. This record was the first world's record ever made by a Southern cow; it was the first Medal of Merit record ever made by a two-year old Jersey; and the third 1000 pound butter record for the state.



The records completed this year, sixty-eight in number, average 11,318 pounds of milk and 527.36 pounds of butter fat. When you consider that forty, or two-thirds of all records were made by two-year olds, this is a very remarkable showing. A two-year old record is considered about seventy per cent of a mature record.

The average production for all cows in the state is about 105.7 pounds of butter fat. These records have given South Carolina dairy cattle a high rating as compared with other Southern states. Although it is estimated that at present 2500 purebred dairy bulls are needed in the state to replace scrubs now in use, the bulls from these record cows will furnish a supply equal to the demand until the farmers can be educated to the importance of using only well selected purebred bulls from tested ancestry.

We are continuing our in-breeding, line-breeding, and out-crossing experiments with Holstein, and Jersey cattle. A summary of the work on this project was reported in the last annual report. The work has gone forward satisfactorily since that time and is being continued along the same line. It takes some years, of course, to secure definite results with a breeding project with cattle, but this is an important line of work and can only be handled satisfactorily by research and educational institutions that maintain definite policies over a long period of years.

### THE COAST EXPERIMENT STATION

The Coast Experiment Station is located in the cut-over pine lands of the lower coastal plain near Summerville, and on the Southern Railway 24 miles west of Charleston. Some splendid results have been secured from experiments with crops, fruits, and vegetables during the past 18 years, and the results have been published from time to time for the benefit of the people of this section.

As the work progressed at Drainland it became evident that much of the cut-over pine lands of the area represented by the coast station would not be needed for cultivation for a long time to come, so interest has centered in forestry experiments and experiments with pastures and beef cattle. The additional land purchased from the Southern Railway in 1921 has been utilized to start larger and more comprehensive experiments with beef cattle. These are now yielding extremely valuable results. A part of the better drained land formerly in pasture has been cleared during the past year and is being prepared for experiments with fertilizers and crop rotations. This station is now fairly well equipped and with slightly increased support will be in a position to undertake a greatly increased amount of through-going research work with field crops and truck crops.

If we were to make comparisons of the most important agricultural and economic problems in South Carolina at the present time, we would say that the protection and reforestation of our cut-over and waste



lands in South Carolina is one of the most important questions confronting our people. Of the eleven to twelve million acres of land in South Carolina not utilized for other purposes and which ought to be growing trees, not more than a third is in forests.

The big problem from the forestry standpoint is the reforestation of the cut-over and abandoned lands. This is a comparatively simple matter in most sections of the state. If fires are kept out and a few seed trees are left, our pines will readily come back. What we need most of all is to protect these cut-over lands and young forests from fire.

During the past 14 years we have conducted experiments at the Coast Station looking to the development of methods of reforesting these cut-over pine lands. We have made studies of methods of seeding our common species of pine, and have introduced several species which are not native in this section. This work has been conducted in cooperation with the Forestry Service of the United States Department of Agriculture, and is now producing results which are of great value in making recommendations as to reforesting these waste lands. Last winter members of the South Carolina Forestry Association visited the Coast Station after their annual meeting in Columbia especially to see these experiments.

Many of the pines being grown there from seed developed much more rapidly than one realizes. The slash pine planted about eight years ago are over twenty feet tall and five inches in diameter. This valuable specimens of pine is now being planted in large areas throughout the lower south and is being tested out in an experimental way in the Piedmont sections of some states. A few seedlings planted at Clemson College are doing well and seemed to stand the excessive drouth this year better than seedlings of long leaf and short leaf pine. The slash pine not only grow more rapidly than the other pines, but will make just as good lumber and more turpentine than the long leaf pine. The long leaf pine planted thirteen years ago have done well but are just about as large now as the slash pine planted eight years ago. The loblolly, another species of pine common to this region, grows faster than the long leaf pine, but not as rapidly as the slash.

We are also making studies of the natural reproduction of the long leaf and loblolly pines, and are studying the influence of burning upon natural reproductions and rapidity of growth of these pines. Where the land is burned over every year, we get no reproduction at all with any of the species except the long leaf pine. Only a few scattering individuals of this species survive the fires, and these grow very slowly and seldom develop into good vigorous trees. Where the fires were kept out, all three of the species of pine common to this section reseeded themselves abundantly and grew off rapidly. In fact, some of our pastures, where we have kept out fires for six or eight years, have grown up to



such thick stands of pines that the grass has been entirely shaded out.

As pointed out in our last annual report, we believe that cut-over land of this section of the state can be used profitably in the production of beef cattle. We have found, however, that the native grass will not stand close grazing and will not carry a sufficient number of cattle to enable the industry to develop as it should. On the other hand, some of the grasses which are being introduced are very encouraging. We are testing out different methods and time of seeding carpet grass and lespedeza. We have tried different methods of preparing the land for seeding as well as seeding without any preparation. Our experience so far indicates that it is best to give the land some kind of preparation. Disking with a large tractor disk has proven economical and practical in areas where the ground oaks and gall berries are not too numerous. Where the underbrush is thick we have secured best results by going in and grubbing up the small oaks and gall berry bushes and plowing and harrowing the land thoroughly before seeding. This enables the grass to get a much quicker start in these poor lands. We now have about 70 acres seeded to carpet grass and 20 acres to other grasses which are being tested. Vasey grass and Dallas grass as well as several other species of *Paspalum* are giving indications of making good pastures in tests on some of these small experimental areas.

The purebred herd of Aberdeen-Angus cattle referred to in our previous report is being continued and increased. The cattle are utilized for the grazing tests during the summer and for feeding and wintering tests during the winter. This breed seems well adapted to the conditions prevailing in the coastal plains and we feel that satisfactory results are being obtained. A wintering test similar to the one reported in the last annual report was conducted during the winter of 1924, and the results were somewhat similar. The average daily gains for the aged cows was .6 pounds, for the two-year old heifers .55 pounds, and for the yearling heifers .54 pounds. The total feed cost per animal for the wintering period which extended from December 3 to February 20 was \$15.50 for the mature cows, \$12.38 for the two-year old heifers, and \$9.98 for the one-year old heifers. The ration used was sorghum silage, crab grass hay, and cotton seed meal, and the feeds consumed were figured at retail market prices.

Except for the drouth in the early spring, which made it difficult to obtain a stand of some crops, the season at this station was favorable for the growth of cotton and corn. The cotton crop was the best produced in several years, twenty-two bales being produced on a little less than twenty-four acres. The spacing test with cotton was especially good this year, a perfect stand having been obtained and good growth conditions obtaining throughout the season. Rows were spaced 3 feet, 3½ feet, 4 feet, 4½ feet, and 5 feet apart, and the plants were spaced different distances in the drill varying from no thinning at all to one



plant every 24 inches. The season was ideal for cotton up until about the first of July, when the summer drouth began and all of the plants shed heavily. Under these conditions one stalk every ten inches in rows  $3\frac{1}{2}$  feet apart gave the highest yield. Where the stalks were farther apart the yields were progressively lower.

The variety test with cotton including 16 varieties was also very good. The yields of seed cotton per acre varied from 1035 pounds in the case of King to 1613 pounds produced by Woolseys Cleveland. Dixie Triumph and Lightning Express came next to Cleveland with 1552 pounds. Lightning Express made the highest yield at the first picking and J. E. Wanamaker's Cleveland came second.

The corn variety test consisting of 9 varieties was conducted and a uniformly good crop produced. The yields are not yet available. The fertilizer and rotation studies and tests with winter cover crops and summer legumes were continued and satisfactory results were obtained.

The varieties of upland rice which have been grown at this station were continued but the exceedingly dry weather during July and August kept them from maturing. Two strains have stood out as better than the others during the past few years. We planned to grow sufficient quantity of these for distribution in a small way among growers this year, but the failure to produce a crop prevented this.

As more land is cleared and additional facilities are available the amount of experimental work at this station with fruits and vegetables is being gradually increased. The fertilizer experiments with Irish potatoes which have been conducted for three years were continued this season. The averages for the past three years show that the best yields were secured from one ton of a 7-7-5, nitrogen seeming to be more important than in the soils at Clemson or Florence, where a 7-5-5 and 7-5-9 produced the highest yields. The source of seed experiments with Irish cobbles were continued and very satisfactory yields were obtained. Seed are included in this test from eleven different states—mostly northern and western—that make a specialty of growing Irish potatoes for seed purposes. This test is included at both of the sub-stations and at Clemson, and the results from all three places will be published in bulletin form.

The blueberries planted at this station in the spring of 1924 are doing fairly well. The plants seem thrifty but little growth was made probably because of the drought. A few of the plants produced berries this season. On soils similar to these blueberries do well in Florida, and it is our purpose to test different varieties and different methods of cultivating them here with a view of encouraging their production on a commercial scale, if this seems advisable. The other small fruits as well as the home orchard made satisfactory growth and produced crops of fruit. The peaches especially do well at this station and grapes and summer apples and plums are very satisfactory.



**PEE DEE EXPERIMENT STATION**

This station is just outside of the city limits of Florence on the Atlantic Coast Line Railway and on the paved highway between Florence and Darlington. This makes it easily accessible and in plain view of hundreds of people that pass from day to day. At first, only a small amount of experimental work was undertaken at this station, and this was principally a duplication of the work which was being conducted at the main station at Clemson College, and at the other sub-station near Summer-ville. The work of the station has grown, however, from year to year until it now includes a great number of projects, and the results from these as published from time to time are proving to be sign posts to better agricultural practices, not only for the farmers in this section, but for those of the state at large.

In soil and climate this station is typical of large areas of the coastal section not only in this state but of neighboring states, and on this account the United States Department of Agriculture has been willing and anxious to cooperate with us in conducting many important experiments here. We have important cooperative projects under way with the Bureau of Entomology. Some of the most thorough-going work with fertilizers, peanuts, sweet potatoes, and forage crops under way in this country is being conducted at this station. These cooperative arrangements with the different offices of the federal government have greatly increased our facilities for thorough-going research work at the Pee Dee Station.

Located as it is in the center of the prosperous Pee Dee section of the state, this station was the logical place for headquarters for our Division of Boll Weevil Control. The fact that the conditions are typical of a large area of cotton producing sections of the southeast, and the fact that splendid facilities were available here for research work of this nature, prompted the United States Bureau of Entomology to cooperate with Clemson College in the Boll Weevil Control investigations which have now been under way there for three years. Since this work was established at the Pee Dee Station the equipment and facilities for research work have been greatly increased. We now have an office and laboratory building adequate to take care of the eight members of the staff who are resident there throughout the year, and the 15 to 20 temporary assistants employed during the active season for field work with boll weevils and with cotton during June, July and August.

While the Pee Dee Station and the Boll Weevil Control Divisions are organized as separate units in the department of agricultural research of Clemson College, they have cooperated so closely in this important work that there has been no conflict and lost motion. This has been due, of course, to the patriotic spirit and loyal devotion of the workers in these divisions to the institution and to their deep interest in the problems



which we are attempting to solve. The Boll Weevil Control work has all been described under the heading "Research Work with Cotton," and is only referred to here because of its close connection with the other work of the Pee Dee Experiment Station.

The kind and number of projects conducted at the Pee Dee Station this year have been much the same as reported last year, because all of the available land on the station has been assigned to projects that are being continued over a period of years. Additional lands have had to be rented, in fact, to take care of some of the short-time experiments and in order to provide additional facilities for some of the work of the Division of Boll Weevil Control. The experiments conducted here include nearly all of the crops indigenous to this state and to the South, such as corn, cotton, sweet potatoes, Irish potatoes, peanuts, oats, velvet beans, soybeans, vetch, rye, and tobacco, as well as such fruits and vegetables as grapes, peaches, plums, strawberries, persimmons, apple, pears, lettuce, cabbage and celery.

When the experimental work was first undertaken at the Pee Dee Station, a very comprehensive rotation and fertilizer experiment was started. This consists of 180 tenth-acre plats arranged in four series, three of which are run in a three-year rotation of cotton, corn, and small grain, and the fourth series in cotton continuously. In the rotation series peas are broadcasted in the corn and allowed to remain on the land, and the peas sown after the oats are cut for hay. It is very interesting to note that this rotation has maintained the fertility of the soil for twelve years without any appreciable decrease in the yields, even where no fertilizer was used. The average yields for the past twelve years show that an 8-5-3 is giving the best results with cotton in the rotation, and an 8-6-4 where cotton is planted continuously.

We are also studying a two year-rotation where cotton is planted one year and corn the next as compared with similar plats grown to cotton continuously and others planted to corn every year. In this series the rotated plats which are not fertilized have of course been decreasing in yield, but the yields of both cotton and corn have been larger than on the plats which are not fertilized, and are planted to the same crop continuously. In this cotton and corn rotation where sufficient fertilizer is applied each year the yields have not decreased. In all of this work the importance of a complete fertilizer is emphasized, and nitrogen has proven to be more important than any other element in maintaining the yield, especially for corn, small grain and cotton.

In the fertilizer experiments, attention has been given to the materials from which the different elements are derived. Three sources of potash have been tested, three sources of phosphorus, and twelve sources of ammonia. In the sources of ammonia tested nitrate of soda has usually yielded the largest return, although there has not been a great deal of difference in the different materials. The organic sources of nitrogen



have given splendid results when applied under cotton and mixed with sufficient inorganic material so that an adequate supply of nitrogen is available throughout the entire growth of the plant. We have been especially struck with the importance of applying some quickly available ammoniates to the plant either at planting time or at the first plowing.

Another very interesting rotation and fertilizer study has been the three-year rotation with sweet potatoes, peanuts, and oats and vetch. This rotation has been continued now for four years and some very interesting results are being secured. The oat and vetch hay has always made a good yield and the cowpea or soybean hay, which followed this crop also produced a good yield. In 1924, the total yield for the season was 6040 pounds, 3750 of this being oats and vetch hay, the balance pea hay. In 1923, the yield was still larger, the total being 7607 pounds of hay, 5285 pounds of this being oat and vetch hay. During this rotation high yields of peanuts and sweet potatoes have been maintained.

The land in these rotations is used in addition for a fertilizer test. The test with sweet potatoes show that the average for the past three years indicate that potash is very necessary in a sweet potato fertilizer. The average yields from an 8-3-0 were 92.9 bushels of marketable potatoes, while 8-3-3 produced 129 bushels and 8-3-6 174 bushels, and 8-3-9, 215 bushels per acre.

It is always important that we know the best varieties of our common crops to plant. This is especially true of such crops as cotton, corn, sweet potatoes, tobacco, and peanuts. Variety tests with these crops have been conducted at this station every year for several years. The results with cotton have already been referred to in this report. In the corn variety test fifteen varieties were planted. The average for the last three years shows that the Pee Dee No. 5 has out-yielded all other strains, with an average yield of 62.8 bushels per acre, while Garlic came second with an average yield of 62.7 bushels.

In cooperation with the Bureau of Plant Industry this station continues to conduct a variety test of sweet potatoes which include practically all the varieties known in this country. The test this year contained thirty-eight varieties. Of these there are only a few that are important enough to justify careful yield records. The Porto Rican is still out-yielding all of the other varieties in the test.

The variety studies with peanuts are continued along the same line as previously reported. Ten of the more promising of the standard varieties are included in the test along with some foreign selections and some pure bred strains developed at this station. Aside from the variety studies with peanuts, we have for several years conducted spacing tests and tests as to the influence of time of shelling on germination, and have experimented to considerable extent with fertilizers and with lime. A bulletin has been prepared covering some of the more important phases of this work and should be available for distribution at an early date.



The work with peanuts constitutes one of the most important lines of investigations under way at this station. Varieties of soybeans are also tested from year to year, both for seed production and for hay. These tests indicate that Ootootan and Laredo are probably the best varieties for hay production and Mammoth Yellow one of the best for seed production.

The hog feeding experiments have been continued along the same line as reported last year. These tests are designed to give information as to the best crops to grow as forage for hogs. Acre lots are planted to soybeans, sweet potatoes, peanuts, corn and velvet beans, and gains made on these crops are compared with gains made by similar groups of hogs fed in dry lots. The extremely dry weather interfered to a considerable extent with this test this year, but the lots planted to sweet potatoes and peanuts are now being used in tests in which peanuts supplemented by 2 per cent corn ration, and sweet potatoes supplemented by tankage and standing corn supplemented by tankage are being compared. Results of experiments already completed along these lines indicate that the most economic production of pork resulted from grazing soybeans and supplementing by two per cent ration of corn.

Plantings of fruits and vegetables have been maintained at this station and some experiments have been conducted along this line every year since the establishment of the station. During the past few years the detail experimental work has been confined largely to potatoes and lettuce. The fertilizer and source of seed tests with potatoes have already been referred to under the section of this report which deals with fruits and vegetables. The model home orchard maintained at this station has given opportunity for studying some of the splendid varieties under these conditions, the methods of managing fruits and the fertilizer and cultural practices for vegetables. Satsuma oranges blue berries, and persimmons are included in our tests here. We are looking forward to the time when some definite experimental work can be undertaken with truck crops. To test effectively, however, it will be necessary to have an additional assistant at this station.

Tobacco is one of the most important crops grown in the Pee Dee section of the state, and some experiments are conducted every year at the Pee Dee Station with this crop. The general crop at the station this year averaged 1100 pounds per acre. About ten of the leading varieties of tobacco are being tested. Some general experiments and observations are being made with fertilizers and it has been noted that wherever there is a deficiency of magnesium in the fertilizer sand drown has been common. Tests with sources of potash indicate that muriate is a better source of potash than sulphate, especially on the sandy soils. Methods of curing and handling tobacco are also being studied and special arrangements have been made in our barns for keeping tobacco in condition while it is being cured. Mr. Currin, the Superintendent of this station, is one of the leading authorities in the state on tobacco, and has done a great deal of valuable work with this crop.



### THE CLEMSON FARMS

Of the 1620 acres of land owned by Clemson College at Clemson, about 900 acres are in cultivation and in pasture, the balance being in campus, roads, and in wooded lands. The cultivated acreage is utilized almost exclusively for experimental purposes and for producing feed for the livestock kept by the college and experiment station. Prior to 1920, about 500 acres of this area had been run as a college farm, the object being to utilize the land for growing crops at a profit and for producing feed for the dairy herd and beef cattle. From time to time during the past 25 years parts of this area have been utilized for growing certain kinds of vegetables and staple food products for the students.

On January 1, 1920, all of this land was turned over to the experiment station and placed under the supervisor of the Director of Agricultural Research for the purpose of providing additional facilities for experimental work with field crops and livestock. Since that time Mr. C. S. Patrick as Head of the Farms Division, has had direct charge of the farming operations. Certain parts of the farm were used at the outset for experimental purposes, and other experiments are being started as the fields are rid of Johnson Grass, Bermuda grass, and nut grass, with which they were heavily infested. Much of the land was badly eroded and some of the hillsides had been abandoned. These areas had to be properly terraced and brought to uniform fertility before they were suitable for field experiments. About 250 acres of this farm is in river bottom and subject to overflow. This bottom land and, of course, is not suited for intensive cultivation or for crops which involve large amounts of labor and other expense as the overflows are so frequent as to make it unprofitable to attempt the growing of such crops. Much of this land is rather poorly drained and can best be utilized for growing corn, small grain and hay.

Accurate yield and cost of production data are being kept on every field on the farm and the cost of each operation in the production, harvesting and marketing of each crop is determined for each season.

Practically all of the bottom land is required to produce corn, grass, and hay for the college herds and work stock. The student body is now furnished all the milk they can use from the dairy herd, but this could not be done at the present price without the silage, hay and oats produced on the farms. About 50 acres of the area turned over to the experiment station in 1920 have been fenced mostly into acre lots for extensive grazing experiments with hogs and beef cattle.

The Board of Trustees and the officers of the College have felt that it is better to utilize these lands for research work with crops and animals in an effort to secure additional information and develop better practices which will benefit all the people as well as provide additional material for teaching, rather than attempt to grow food for the students which is a practice of doubtful value with the land and facilities at our command.



### PUBLICATIONS

The growing interest in scientific agriculture and the consequent greater appreciation of agricultural research work has brought about a much greater demand for publications of the South Carolina Experiment Station—this in spite of the fact that Extension Service publications supply a large part of the popular demand for agricultural instruction. Consequently, our supplies of experiment Station publications are used up rapidly, making more urgent the need for new publications as soon as new material becomes available. This applies particularly to certain lines which have become more popular under the changing agricultural conditions.

The mailing list of the station now contains about five thousand names, mostly South Carolina farmers, and new names are being added more rapidly than formerly. However, the list is kept closely revised so that no "dead" names remain very long on the list, which is classified so that any given publication is sent only to those who have asked for material on the subject to which that publication belongs. In this way much waste of printed matter is prevented.

#### Publications Issued

During the fiscal year seven new publications were issued as follows:  
Bulletin 220, "Analyses of Commercial Fertilizers."

Bulletin 221, "Farm Organization and Cost of Production on Cotton Farms in Anderson County, South Carolina."

Bulletin 222, "Studies with Anthracnose Infection in Cotton Seed."

Bulletin 223, "Progress Report on Studies on Boll Weevil Control Under South Carolina Conditions."

Circular 32, "Protecting South Carolina from Plant Diseases and Crop Pests."

Circular 33, "Poisoning the Boll Weevil in the Piedmont Section of South Carolina."

Thirty-seventh Annual Report for the year ending June 30, 1924.

#### Experiment Station Library

The Experiment Station Library suffered a total loss in the fire which destroyed the Agricultural Building on April 2, 1925, thus annulling all of the good work which had been done toward establishing a fine collection of agricultural literature. It has been necessary, therefore, to start again in the matter of building up an agricultural research library. And though the work has been carried on under very unfavorable conditions as to working quarters, etc., considerable progress has been made. The librarian has been diligent in her efforts to get new material from all possible sources, and the officials of various state experiment stations and of the United States Department of Agriculture have very kindly aided in this direction. The material which has been so far gathered is still



somewhat in confusion but progress is being made in arranging, binding, and otherwise preparing for service the material which has been gathered. When permanent quarters become available much better progress can be made.

### Publicity Work

The usual practice has been followed of writing News Letters and special articles for The Weekly News Notes and for newspaper and agricultural journals, calling attention to the new publications of the station and to older publications of new importance, and special articles have been prepared summing up various phases of research work for the benefit of the public. Articles by various members of the station staff have also been prepared and given publicity through the Division of Publications, and otherwise. The material in these articles is, of course, based largely on the results of our research work as conducted during the fiscal year or before. In this way the public is given a wider and better knowledge of the work which the station does, and this in turn enables us to be of great service to the public. No opportunity is lost to remind the public of the need and value of agricultural research.

### THE SAND HILL SUB-STATION

The Board of Trustees and officers of Clemson College have been looking forward for the past fifteen year to the establishment of an additional sub-station in the sand hill region of the state. Legislative authority for the establishment of such a station was granted in 1922, at the time plans were being made for the establishment of the Pee Dee Station. An Act passed by the general assembly and approved by the governor in 1912, reads as follows:

"The Board of Trusees of Clemson Agricultural College, of South Carolina, are hereby authorized and empowered to establish and operate two or more experimental stations, as in their judgment the funds of said college shall justify, for the purpose of testing soil, climatic and other conditions and farm demonstration work; **PROVIDED**, that one of such stations shall be established within the Pee Dee section of the State, one within the sand hill portion thereof, and the others wherever in the judgment of said Board will result to the best interest of the State: **AND PROVIDED, FURTHER**, That due advertisement for bids in money and donations of land for the location of any such stations in any section of the State shall be made before the location thereof is determined."

Early in the summer of 1924 the Columbia Chamber of Commerce took up with the College the matter of establishing such a station on the Camp Jackson site in Richland county. This served to open up again the whole matter of the proper location for such a station and caused sites offered in Aiken, Lexington, Richland, Kershaw, and Chesterfield counties to be surveyed.



The urgent need of an experiment station in the Sand Hill section is very evident. The Sand Hill region proper consists of a belt 50 to 100 miles wide across the center of the entire state. Besides this region there are large areas all over the Coastal Plain region where the sandy types of soil predominate. In fact, the Norfolk series, which is the type that includes the coarse sandy soils, is more abundant than any other soil type in the state and represents nearly one-third of the total area of the state.

At the present time this institution has no facilities for experimenting with crops, fertilizer, rotations, fruits, or vegetables on this large and important soil type. There is reason to believe that these soils can be improved to the point where they will produce as much cotton under boll weevil conditions as is produced by the more fertile types of soil in other sections.

The Sand Hills are known to be adapted to the production of peaches dewberries muscadine grapes, and other fruits, and certain crops such as sweet potatoes, peanuts, melons, etc., are known to do best in this region. The station, however, has not had opportunity to experiment with these crops under these conditions to determine the methods, fertilizers, varieties, etc., that will insure success and reduce the hazards of production. Many fundamental soil fertility problems now needing solution could be worked out better on a Sand Hill station than elsewhere because here you would have pure cultures of sand to work with and the fertilizers and rotation effects would not be obscured by stored up fertility or other variable factors.

This large section of our state, which is now but poorly developed, could be made one of the most prosperous parts of our commonwealth if we could by adequate research work learn how to utilize these soils in producing fruits, vegetables, and certain new crops that would give us additional industries and provide new sources of income and increase the wealth of the state. A comparatively small amount of money invested in this enterprise should yield large returns on the investment and help to make permanently prosperous a section that is now exceedingly poor and undeveloped.

### PROJECTS UNDER WAY

The following is a list of projects now under way in the Research Department:

#### Agronomy Division

A study of the factors influencing cost of producing cotton, corn, small grains, hay, and other crops.

Cotton culture and spacing tests.

Ear-to-row breeding work with corn

Effects on corn of companion cropping legumes



- General comparative fertilizer tests
- Comparative tests of phosphorus fertilizers
- Comparative tests of potash fertilizers
- Comparative tests of sources of nitrogen
- Variety tests with corn
- Variety tests with cotton
- Variety tests with wheat
- Variety tests with oats
- Variety tests with barley
- Variety tests with sorghum
- Variety tests with peanuts
- Variety tests with velvet beans
- Comparative tests of grasses and forage crops
- Tests with imported grasses and forage plants
- Plant-to-row selection of wheat
- The effect of stirring soil on moisture content, oxidation, nitrification and crop yield
- A study of factors influencing oil content of cotton seed
- Comparative tests of nitrogenous fertilizer at the Pee Dee and Coast Stations
- General comparative fertilizer tests with cotton, corn, and small grain at the two sub-stations
- Breeding work with cotton
- Breeding work with corn
- Breeding work with wheat
- Breeding work with barley
- Breeding work with rye
- Tests on time of applying potash to cotton
- Tests on time and method of applying fertilizers to cotton
- Tests of theoretical amount of fertilizer compared with popular formulas
- The comparative value of different legumes as soil improvers when used in rotation with cotton and corn
- General comparative fertilizer tests conducted in cooperation with farmers on various soil types.

#### **Animal Husbandry Division**

- Comparative tests of value of velvet bean meal, peanut meal, and cotton seed meal in hog feeds
- Investigation of factors influencing the hardness of fat in hogs
- Tests with breeds of sheep
- Breeding experiments with horses and mules
- Comparative tests of peanuts, sweet potatoes, soybeans, velvet beans and corn for pork production
- A study of food value of velvet beans for hogs and beef cattle
- Cost of producing hogs



**Botany Division**

A study of the factors influencing the growth and development of cotton buds and bolls

A study of rust resistance in small grains

A study of the bacterial diseases of cotton

Plant disease survey

Miscellaneous cotton disease investigations

Forestry experiments to determine methods of seeding and rate of growth of various species

**Dairy Division**

Preparation and economic uses of hay in feeding dairy cattle

The determination of the most economical carbohydrate concentrate to balance the dairy ration in the South

The prepotency of bulls

Corn silage as compared with sorghum silage for milk production

The feed required and the cost of raising dairy calves

Line-breeding and out-crossing as systems of breeding dairy cattle

Line-breeding of Holsteins

Official testing of dairy cows in the state

A study of the influence of different feeds on growth and development of dairy heifers

**Entomology Division**

Investigation of pecan insects

A study of the pea aphid

The influence of different factors on the hibernation of the boll weevil

Dusting as a means of boll weevil control

The toxicity of insecticides

Corn bill bug investigations

Corn weevil studies

**Horticultural Division**

Nitrate of soda tests on bearing peach trees

Fertilizer tests on young and bearing peach trees

Variety tests with apples and grapes

Methods of pruning bunch grapes

Tests of sources of Irish potato seed

Fertilizer tests on Irish potatoes

Comparison of certified and noncertified potato seed

Breeding work on Lookout Mountain potatoes

Fertilizer tests on lettuce

A study of methods of propagating apples

**Boll Weevil Control Division**

Comparative efficiency of calcium arsenate dust, calcium arsenate molasses mixtures, and other liquid poison for boll weevil control in the cotton fields in different sections of South Carolina



Field tests with various makes and kinds of machines for applying poison to cotton.

Effect of quality of cotton seed on yield, staple, lint percentage, and money value per acre.

Effect of topping cotton on rate of fruiting and development and yield

Effect of pruning on fruiting of cotton

Effect of time of planting on development and fruiting of cotton

Effect of seed treatment on yield, etc., of cotton

Tests of methods of cultivating cotton

Effect of late cultivation

Time of turning under cover crops of rye

Time and method of preparing land for cotton

Hill test of cotton

Cotton spacing tests

Effect of fertilizers on fruiting habits of cotton

Time of applying fertilizers to cotton

Cotton variety tests

#### **Agricultural Economics Projects**

A continuous farm management study of cotton farms in Anderson county, South Carolina

Special farm management studies

Farm business and cost of production studies with farmers

Problem in taxation

Land prices and cycles

The comparative advantages of various forms of intermediate and long-time credit

Investigations into the attitude of farmers to the marketing contract of the Co-operative Cotton and Tobacco Associations in South Carolina.

Investigations into the foreclosures of farms since 1909

Production, supply and demand studies

Measuring purchasing power of farmers

Cotton marketing investigations

Respectfully submitted,

H. W. BARRE,

Director of Experiment Station.



## REPORT OF SECRETARY OF FERTILIZER BOARD

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Mr. S. B. Earle, Acting President.  
Clemson College, S. C.

Dear Sir:—

I respectfully submit the following report of the work of the Fertilizer Department for the fiscal year ending June the 30th.

The sale and movement of fertilizers commenced this season later than usual, due perhaps to higher prices and being sold only for cash. Sales did not fairly begin, even in lower and eastern counties, until about March the first when the Agricultural Societies in the several counties began to function, relieving the restricted credit conditions. As shown by sales of tags, the total sales for the year were for 867,078 tons, of which 28,628 were for cotton seed meal.

While the total tonnage was slightly less than last year, it is a noteworthy fact that the samples collected show a higher grade was offered, and an appreciation of the economy in getting plant-food in concentrated form, thus dispensing with the expense of freight and handling incident to the lower grade. This has been the result of wider dissemination of agricultural knowledge, and has already driven the lower grades from the markets.

The Department has furnished many formulas for home mixing of high grade raw materials, and this practice will result in economy both in the cost and quality of these fertilizers; it is prepared to furnish on application formulas for any and all sorts of crops, and of any grade desired.

The increased production and use of cyanamid or limenitrogen should cheapen the cost of other ammoniates. Another source has been added in the use by cities and important towns of their own abattoirs where dead animals and other waste materials instead of being burned as formerly, are with the aid of chemicals converted into valuable fertilizers. Buyers should experiment carefully with new materials offered on the markets to prove their claimed merit.

### INSPECTION

The usual number of inspectors were employed this season,—three of them going on duty February the first in the southern and eastern counties, the trucking section;—and the others in upper counties on March the first; but all were kept on until June the first to make the inspection as thorough and complete as possible. Twelve hundred and



thirty nine samples drawn and sent in by them have been analyzed by the Chemists, beside one hundred and twenty other samples drawn and sent by the farmers themselves. All these have been copied and mailed both to the manufacturers and purchasers. The trade in fertilizers throughout the season has been irregular, the samples showing a geater multiplicity of brands and guarantees then former years, and many of them deficient in one or more of their ingredients. Some cases of short weights were reported by inspectors and adjusted by the companies satisfactory to the buyers; some violations of the fertilizer laws have been turned over for legal action.

The analyses of the samples are now being compiled in our annual bulletin, and will be published and ready for distribution in November. For a discussion and more definite classification of these analyses, I respectfully refer to the detailed report of Dr. R. N. Brackett, Chief Chemist, in appendix to the bulletin; and for costs incurred for inspection and analysis to the report of our College Treasurer.

Respectfully submitted,

H. M. Stackhouse, Secretary.



## REPORT OF THE CHIEF CHEMIST

Mr. S. B. Earle, Acting President,  
Clemson College, S. C.

Dear Sir:

I respectfully submit the following report of the analytical work of this Department on commercial fertilizers, waters, etc., done for the Board of Fertilizer Control, and for the citizens of the State, and for other Departments of the College, during the year ending June 30th, 1925.

For the sake of comparison, the figures for last year are given side by side with those for this year:

	1923-1924	1924-1925
Official samples of fertilizers .....	1272	1239
Farmers' samples of fertilizers .....	175	121
Waters .....	58	48
Ores, Minerals, rocks, etc., for identification.....	23	28
Limestones, marls, and lime .....	9	4
Assays for gold and silver .....	6	0
Ashes (wood, etc.) .....	2	0
Miscellaneous .....	34	36
S C. Experiment Station samples .....	2195	874
	<hr/> 3774	<hr/> 2350

A complete report of the work done for the Experiment Station is made to Director H. W. Barre, but I may say for your information that the 874 samples listed above consisted of:— For the Agronomy Division: 10 samples of rain water examined for sulphur content; 340 samples of soils for nitrates; 24 samples of fertilizer; 2 samples of plants for ash determination; 342 samples of cotton seed. For Animal Husbandry Division: 15 feed samples. For Dairy Division: 2 samples of silage. For Entomological Division: 4 samples of sodium arsenate; 17 samples of fillings for insecticides; the following samples for citizens of the State through the Division Entomology: 1 sample of sodium arsenite; 86 samples of calcium arsenate; 1 sample of dust poison; 1 sample of Hill's Mixture. For Horticultural Division: 4 samples of Irish potatoes. The following samples for citizens of the State: 22 samples of soils; 1 sample of cotton leaves for investigation; 1 sample each of soybean hay and pigeon pea hay.



## OFFICIAL FERTILIZER SAMPLES

## Classification

	1923-1924	1924-1925
Complete fertilizers .....	906	845
Special mixtures (phosphoric acid and ammonia) .....	65	61
Acid phosphates .....	82	90
Acid phosphates with potash .....	4	9
Cotton Seed Meals .....	48	59
Nitrate of Soda .....	58	68
Foreign Potash .....	69	61
Dried blood .....	2	7
Fish .....	16	14
Tankage .....	2	6
Sulphate of ammonia .....	3	12
Miscellaneous .....	17	7
	<hr/> 1272	<hr/> 1239

The miscellaneous samples were :—one each, “Nitrogeneous”; blood, no guarantee; home mixture; abbatoir product, no guarantee; castor pomace; acid phosphate found complete, rejected by the Secretary Board of Fertilizer Control; nitrate of soda. These seven samples have been omitted from the discussion which follows, together with one sample of Peruvian guano, and one of dried blood, which for good and sufficient reasons were rejected by the Secretary Board of Fertilizer Control, thus leaving 1230 samples to be considered.

## Deficient Samples

Of the 1230 samples considered in this discussion 198 fell below the commercial value based on guarantee, as follows:—

In available phosphoric acid .....	6
In ammonia .....	87
In potash .....	18
In available phosphoric acid and ammonia .....	14
In available phosphoric acid and potash .....	15
In ammonia and potash .....	45
In available phosphoric acid, ammonia and potash	13

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198

Last season out of 1256 samples 123, or 9.79 percent, were deficient in commercial value based on guarantee, while this season the number so deficient is 198 out of 1230 samples, or 16.09 percent.



The extent to which these 198 samples fell below the guaranteed analysis in percent is as follows:—

	0.00-0.10	0.10-0.25	0.25-0.50	0.50-1	1 and over
In available phosphoric acid .....	8	15	8	10	10
In ammonia .....	11	51	50	24	22
In potash .....	13	22	25	20	12
	—	—	—	—	—
	32	88	83	54	44

This is a much worse showing than last year, or even than usual. Of the 198 samples which fell below guaranteed commercial value, 102 were deficient three percent or more in commercial value, as follows:—

In available phosphoric acid .....	3
In ammonia .....	48
In potash .....	6
In available phosphoric acid and ammonia .....	10
In available phosphoric acid and potash.....	3
In ammonia and potash .....	22
In available phosphoric acid, ammonia and potash	10
	—
	102

Last season out of 123 samples deficient in commercial value based on guarantee, 43 or 34.95 percent were three percent or more deficient, while this year 102 samples out of 198, or 51.51%, were three percent or more deficient, a large increase. When the comparison is made on the total number of samples, last season out of 1256 samples 43 were deficient three or more percent, or 3.42% of the total, this season 102 samples out of 1230 were three percent or more deficient in commercial value, or 8.29% of the whole number, which is a large increase.

The extent to which these 102 samples, deficient three percent or more in commercial value, fell below the commercial value guaranteed is as follows:—

	0.00-0.10	0.10-0.25	0.25-0.50	0.50-1	1 and over
In available phosphoric acid ....	3	5	5	6	9
In ammonia .....	1	16	30	23	20
In potash .....	2	6	12	14	9
	—	—	—	—	—
	6	27	47	43	38

In addition to the 198 samples deficient in commercial value based on guarantee, there were 368 samples which were found deficient, below the guaranteed analysis, in one or more ingredients, the deficiency, however, being made up by an excess of other ingredients, as follows:—



In available phosphoric acid .....	91
In ammonia .....	68
In potash .....	170
In available phosphoric acid and ammonia.....	4
In available phosphoric acid and potash .....	15
In ammonia and potash .....	20
	<hr/>
	368

Last season out of 1256 samples 366 were deficient in one or more ingredients, but not deficient in commercial value based on guarantee, or 29.14 percent, while this season out of 1230 samples 368 were so deficient, or 29.91 percent, which is a very slight increase.

The extent to which these 368 samples fell below the guaranteed analysis in percent is as follows:—

	0.00-0.10	0.10-0.25	0.25-0.50	0.50-1	1 and over
In available phosphoric acid .....	24	35	28	17	5
In ammonia .....	36	52	4	1	0
In potash .....	44	82	47	25	2
	—	—	—	—	—
	104	169	79	43	7

These figures show considerably fewer deficiencies in ammonia, and slightly fewer potash deficiencies, and these potash deficiencies are about as serious as last year.

**Acid Phosphates:**—As was the case last season there were no goods of this kind guaranteed less than 16% available phosphoric acid. No samples were found below their guarantee, but usually from one to two percent above. One sample was guaranteed 18.14%. The total number of samples was 89 this season. Last season out of 82 samples, four were found deficient, but only one as much as three percent deficient in commercial value.

**Acid Phosphates with Potash:**—This season there were nine samples of goods of this kind, of which two were found deficient in potash, but only one deficient in commercial value, and that three percent. Last season we had four samples of goods of this kind, of which three were guaranteed 10-0-4, and one sample 10-0-2, but analyzed 10-0-4. Of the samples guaranteed 10-0-4, one was found up to guarantee, one deficient in potash, but not in commercial value; and one deficient in commercial value, but not three percent.

**Potash Deficiency in Potash Salts and Mixed Goods:**—In connection with the deficiencies in potash, not only in acid phosphates with potash, but also in other mixed goods, the following summary of potash deficiencies for the past 21 years may be interesting. It is to be noted that none of the deficiencies here listed are of samples deficient in commercial value:—



Year	Number of Samples	Deficient in one or more Ingredients	Deficient in Potash only	Deficient in Potash, percent
1905	522	165	53	32.12
1906	655	201	62	30.84
1907	743	153	34	22.22
1908	713	161	54	33.54
1909	805	197	85	43.14
1910	1188	235	86	36.60
1911	1605	393	182	46.31
1912	1689	380	225	59.12
1913	1922	389	90	23.13
1914	2537	534	113	21.16
1915	1227	333	107	32.13
1916	1598	378	54	14.28
1917	1594	477	75	15.72
1918	1474	438	68	15.52
1919	1301	362	100	27.62
1920	1668	519	193	37.19
1921	763	229	116	50.65
1922	722	230	111	48.26
1923	1181	360	151	41.94
1924	1272	366	173	47.27
1925	1239	368	170	46.20

This summary shows that of the samples deficient in one or more ingredients, but not deficient in commercial value, a very large percentage is deficient in potash only.

This deficiency was especially marked during the years 1909 to 1912 inclusive. While there was a considerable drop in 1913 and 1914, the percentage deficiency in 1915 was the same as in 1905. The results for 1916 to 1919, inclusive, are not very significant on account of the scarcity of potash salts. During this period many mixtures were made without potash, so-called "special mixtures." The number of such mixtures amounting in 1916 to 555, in 1917 to 640, in 1918 to 470, and in 1919 to 357, in 1920 to 284. Since 1920 there have been less than 100 each year; indeed, this season only 61. The period 1920 to 1924, inclusive marks a period of high potash deficiency in percentage. It will be noticed that there is a slight decrease under last year.

**Top Dressers:**—The number of samples of goods of this class received for analysis this season was 31, against 38 last season. Of the 31 samples analyzed this season 18 were deficient in ammonia, and of the 18, fourteen were deficient in commercial value, finally of the fourteen, nine were three percent or more deficient in commercial value.

The guarantees this year as compared with last season are as follows:—2-7-0, 18 of which 12 were deficient in ammonia, and of these 12, four were not deficient in commercial value, and eight deficient in commercial value, four of the eight being three percent or more deficient, last year 22, of which four were deficient in ammonia, but not in commercial value, two deficient in ammonia, but not three percent, and three



deficient three percent or more in commercial value; 2-7-7, one up to guarantee, last year none; 4-7½-0, four of which two were up to guarantee, and two were deficient in ammonia and three percent or more in commercial value, last year seven, of which one was found deficient in ammonia, but not in commercial value; 4-7½-1, three, of which two were deficient in ammonia, one being three percent and the other not three percent deficient in commercial value, last year none; 4-10-0, two, but deficient in ammonia and three percent or more in commercial value, last year one deficient in ammonia, but not in commercial value; 0-9-3, one up to guarantee, last year the same; 8-5.70-0, one up to guarantee, last year none.

Samples with the following guarantees were analyzed last year but none of these guarantees were received this sason:—2-7-2; 2-10-2; 2-10-0; 4-7-0; 5-9-0.

### AVERAGES OF ANALYSES

	1923-1924		1924-1925	
	Found	Guaranteed	Found	Guaranteed
<b>Acid Phosphate</b>				
Available phosphoric acid .....	17.44	16.00	17.27	16.02
<b>Special Mixtures</b>				
(Acid phosphates with ammonia)				
Available phosphoric acid .....	6.43	5.69	7.40	6.52
Ammonia .....	5.64	5.55	4.85	4.91
<b>Complete Fertilizers</b>				
Available phosphoric acid .....	9.06	8.46	9.20	8.76
Ammonia .....	3.61	3.49	3.50	3.42
Potash soluble in water .....	3.52	3.48	3.41	3.31
<b>Cotton Seed Meals</b>				
Ammonia equivalent of nitrogen .....	7.29	7.02	7.31	7.39
<b>Nitrate of Soda</b>				
Ammonia equivalent of nitrogen .....	18.70	18.10	19.18	18.11
<b>Kainits</b>				
Potash soluble in water .....	13.64	12.19	13.45	12.39
<b>Muriate of Potash</b>				
Potash soluble in water .....	48.85	49.67	50.57	50.00
<b>Sulphate of Potash</b>				
Potash soluble in water .....	49.11	48.67	49.17	48.31
<b>Manure Salts</b>				
Potash soluble in water .....	20.05	20.00	20.29	20.00
<b>Acid Phosphates with Potash</b>				
Available phosphoric acid .....	10.72	10.00	10.58	10.00
Potash soluble in water .....	3.75	3.50	4.09	4.00



As was the case for the last three years, no samples of potash salts were received this season designated as American potash.

The averages of the potash salts given above represent the following numbers of samples:—kainit this year 42, last year 59; muriate of potash this year 8, last year 3; sulphate of potash this year 4, last year 3; manure salts this year 7, last year 4.

The following table shows the yearly averages of the analyses of commercial fertilizers from the time the Board of Trustees of The Clemson Agricultural College of South Carolina took charge of the fertilizer inspection down to the present time, or from 1891 to 1925, inclusive:—



## YEARLY AVERAGES OF ANALYSES FROM 1891 TO 1925, INCLUSIVE

Season	Acid Phosphates		Acid Phosphate with Potash			Complete Fertilizer				Cotton Seed Meals				Kainita		Muriate Potash		Nitrate of Soda		Acid Phosphate with Ammonia		
	Number of Samples	Available Phosphoric Acid—Per Cent.	Number of Samples	Available Phosphoric Acid—Per Cent.	Potash Soluble in Water—Per Cent.	Number of Samples	Available Phosphoric Acid—Per Cent.	Ammonia—Per Cent.	Potash Soluble in Water—Per Cent.	Number of Samples	Available Phosphoric Acid—Per Cent.	Ammonia—Per Cent.	Potash Soluble in Water—Per Cent.	Number of Samples	Potash Soluble in Water—Per Cent.	Number of Samples	Potash Soluble in Water—Per Cent.	Number of Samples	Ammonia—Per Cent.	Number of Samples	Available Phosphoric Acid—Per Cent.	Ammonia—Per Cent.
1890-1	49	13.02	19	11.84	1.65	173	9.34	2.68	1.96	30	—	8.37	—	21	12.75	1	51.96	1	19.22			
1891-2	29	12.92	16	11.50	1.49	112	8.83	2.80	1.95	25	—	8.21	—	18	12.51	—	—	1	18.63			
1892-3	48	12.32	26	11.63	1.22	150	9.00	2.91	1.65	20	2.62	8.40	1.32	20	12.05	—	—	—	—			
1893-4	46	13.24	22	12.01	1.51	132	9.27	2.53	1.79	22	2.45	8.64	1.69	17	12.37	—	—	—	—			
1894-5	46	13.55	15	12.09	1.66	87	9.42	2.55	1.77	33	2.58	8.19	1.66	19	12.30	—	—	—	—			
1895-6	42	13.43	26	11.99	1.39	115	9.31	2.64	1.86	34	2.57	8.45	1.61	16	12.45	—	—	—	—			
1896-7	59	13.61	34	12.06	1.61	117	9.55	2.70	1.91	40	2.53	8.69	1.64	22	12.44	—	—	—	—			
1897-8	63	13.67	50	11.54	2.06	141	9.15	2.70	1.93	39	2.37	8.39	1.58	20	12.68	—	—	—	—			
1898-9	73	13.74	68	11.77	1.99	134	9.32	2.73	2.21	40	2.76	8.25	1.75	14	12.78	2	51.93	1	19.23			
1899-1900	73	13.58	63	11.58	2.00	124	9.50	2.73	2.13	52	2.27	8.73	1.63	8	12.73	4	50.95	2	18.96			
1900-1	56	14.00	55	11.49	2.65	139	9.40	2.87	2.47	60	2.38	8.55	1.54	12	12.61	2	48.92	3	19.01			
1901-2	45	14.11	51	11.09	2.55	141	9.39	2.84	2.34	49	2.57	7.93	1.63	16	12.85	4	50.54	3	18.96			
1902-3	51	13.74	55	10.94	2.65	139	9.02	2.69	2.42	60	2.27	8.08	1.48	15	12.92	2	50.25	2	19.15			
1903-4	59	14.32	75	11.12	2.81	180	9.12	2.99	2.90	57	2.28	7.92	1.54	11	12.94	7	49.79	6	18.87			
1904-5	81	14.81	82	10.70	3.07	250	9.19	3.12	2.90	62	2.41	7.42	1.54	26	12.54	6	50.49	7	18.73			
1905-6	87	14.95	94	10.97	3.30	375	9.34	3.26	2.98	71	2.42	7.51	1.57	29	12.83	13	50.05	19	18.67			
1906-7	111	14.95	72	10.76	3.21	390	8.91	3.29	3.29	99	2.68	7.32	1.69	30	12.78	13	51.52	20	18.49			
1907-8	91	14.71	64	10.57	3.54	363	9.17	3.01	3.01	114	2.37	7.40	1.61	39	12.91	15	51.04	17	18.33			
1908-9	108	15.02	80	10.55	2.93	396	9.16	3.03	3.08	115	2.39	7.27	1.71	45	13.03	14	50.46	21	18.26			
1909-10	159	15.18	74	10.16	3.54	599	8.89	3.31	3.34	133	2.37	7.20	1.67	73	13.10	26	50.96	40	18.10			
1910-11	187	15.39	101	10.62	3.48	942	9.00	3.34	3.33	177	2.46	7.26	1.59	63	13.00	24	50.18	50	18.46			
1911-12	180	15.42	116	10.68	3.25	960	9.07	3.46	3.22	158	2.17	7.54	1.58	69	14.04	47	50.42	76	18.55			
1912-13	176	15.83	85	10.43	3.63	1199	8.86	3.54	3.57	171	2.56	7.37	1.65	69	13.72	29	51.51	48	18.64			
1913-14	229	16.10	91	10.63	3.93	1523	8.79	3.44	3.75	188	2.36	7.28	1.63	146	14.12	65	50.41	92	18.25			
1914-15	150	16.30	69	10.75	2.69	773	8.91	2.96	2.70	90	2.46	7.21	1.56	5	13.51	2	50.17	71	18.56	18	12.09	3.75
1915-16	200	16.40	7	10.72	2.12	385	8.73	3.42	1.49	245	2.31	7.05	1.51	3	13.44	0	—	33	18.53	555	8.85	3.71
1916-17	118	16.62	1	10.90	3.91	501	8.70	3.31	2.13	202	2.44	6.88	1.54	—	—	—	—	45	18.69	640	8.76	3.67
1917-18	106	16.71	3	9.99	2.82	521	8.54	3.09	2.25	266	2.33	7.06	1.57	—	—	—	—	21	18.50	470	8.66	3.59
1918-19	69	16.86	6	10.36	3.58	544	8.82	2.95	2.23	199	2.34	7.06	1.47	—	—	—	—	11	18.59	357	8.84	3.39
1919-20	81	16.47	14	9.82	3.10	992	8.64	3.27	2.92	94	2.61	7.08	1.51	65	13.82	4	46.78	40	18.47	284	8.52	3.27
1920-21	79	16.53	6	10.18	3.06	411	8.55	3.28	2.77	77	—	7.33	—	37	13.63	3	49.89	44	18.61	94	8.50	3.68
1921-22	73	17.08	2	11.40	2.71	434	8.68	3.30	2.96	30	—	7.39	—	32	12.99	3	51.43	34	18.79	89	8.63	4.01
1922-23	97	17.17	8	10.64	3.70	796	8.72	3.55	3.39	39	—	7.16	—	41	13.10	4	50.66	59	18.61	90	9.06	3.74
1923-24	83	17.44	4	10.72	3.75	906	9.06	3.61	3.52	48	—	7.29	—	59	13.64	3	48.85	58	18.70	65	6.43	5.64
1924-25	89	17.27	9	10.58	4.09	843	9.20	3.50	3.91	59	—	7.31	—	42	13.45	8	50.57	66	19.18	63	7.40	4.85



## NITROGEN

## Deficiencies, Sources, Availability

**Nitrogen Deficiencies:**—In connection with the subject of deficiencies of nitrogen, or ammonia equivalent for the past 21 years, the following table is interesting. It is to be noted that none of the deficient samples listed is deficient in commercial value:—

Year	Number of Samples	Deficient in one or more Ingredients	Deficient in Nitrogen only	Deficient in Nitrogen, percent
1905	522	165	61	36.96
1906	655	201	87	43.28
1907	743	153	81	52.94
1908	713	161	77	47.82
1909	805	197	74	37.56
1910	1188	235	79	33.61
1911	1605	395	107	27.22
1912	1689	380	71	18.68
1913	1922	389	190	48.84
1914	2537	534	257	48.13
1915	1227	333	145	43.54
1916	1598	378	130	34.39
1917	1594	477	224	46.96
1918	1474	438	189	43.15
1919	1301	362	160	44.19
1920	1668	519	123	23.70
1921	763	229	22	9.61
1922	722	230	41	17.82
1923	1181	360	99	27.50
1924	1272	366	105	28.69
1925	1239	368	68	18.47

This table shows that of the samples deficient in one or more ingredients, but not deficient in commercial value, a very large percentage is deficient in ammonia only, with very few exceptions. The average deficiency in ammonia for the whole period of twenty-one years is a trifle less than 35 percent; for two seasons it amounted to nearly 50 percent; one season (1907) it amounted to more than 50 percent. The deficiency this season is almost the same as in 1912. Only once in twenty-one years has the deficiency been less than 10 percent (1921.)

**Nitrogen, sources and availability:**— The 1924 Supplemental Act to the fertilizer law, approved March 21, 1924, effective on and after August 1, 1924, requires the manufacturer to guarantee the percentage of nitrogen or ammonia from mineral and from organic sources, a certain variability being allowed, and also an interchange of ammoniates of equal agricultural value within each class.

There were only 76 samples in which the mineral and organic ammonia was not guaranteed out of a total of 906 samples. Of the 76 unguaranteed samples, thirty-eight were collected in the fall of 1924 and were no doubt goods which had been made up before the Supplemental Act went into effect.



The following table, showing the guarantees of mineral and organic ammonia in mixed goods, may be of interest:—

Mineral	Organic	
50	50	243
65	35	162
60	40	150
70	30	57
66 2-3	33 1-3	54
40	60	41
25	75	28
33 1-3	66 2-3	24
45	55	16
55	45	9
20	80	8
75	25	6
95	5	5
33	67	5
		808

The remaining 22 were guaranteed: one each, 26-74; 15-85; 85-15; 43-57; 0-100; two each, 67-33;  $62\frac{1}{2}$ - $37\frac{1}{2}$ ; 90-10; three each, 30-70; 54-46; 80-20.

The variation from guarantee in organic and mineral was very large in some cases, usually leaning to the mineral. On the whole, however, there was a very good agreement between the found and guaranteed mineral and organic ammonia within the variation from guarantee allowed by the Supplemental Act of 1924.

The nitrogen availability standards for the coming season are the same as they have been for the past ten years, and are as follows:—

1st. The Modified Street Neutral Permanganate Method is still in force.

2nd. An unmixed fertilizer material furnishing organic nitrogen must show an availability of 85 percent of the total organic nitrogen found on analysis.

3rd. The water-insoluble organic nitrogen in mixed fertilizers must show an availability of 75 percent by Street's Method, if this water-insoluble organic nitrogen amounts to one-third or more of the total nitrogen found on analysis.

Of the 906 mixed fertilizers examined for water-soluble ammonia 47 samples were found to contain water-insoluble organic nitrogen amount-



ing to one-third or more of the total nitrogen found on analysis. All of these 47 samples were examined by Street's Method, and all except three were found up to the requirements of 75 percent availability. Last season there were 89 samples out of 971 and all found up to the requirement.

The three samples which fell short in availability requirement, together with the names of the companies and the percentage availability found are as follows:

Sample No.	Company	Percent Availability
240	Dawhoo Chem. Co., Charleston, S. C. ....	65
395	F. S. Royster Guano Co., Norfolk, Va. ....	73
398	Morris Fertilizer Co., Wilmington, N. C. ....	69

**Farmers' Samples of Fertilizers:**—In addition to the official samples of fertilizers collected by inspectors, there have been analyzed this season 121 samples for purchasers, as provided for in Section 17 of the fertilizer law, effective July 1st, 1920. This is nearly 31 percent less than were received for analysis last year.

**Waters:**—Of the 48 samples of water listed, eighteen were analyses of the College water supplies; twenty-eight were sanitary analyses and one complete mineral analysis for citizens of the State; two were analysis of boiler waters for citizens of the State.

**Ores, Minerals, etc.:**—Twenty-eight samples of clays, micas, quartzs, iron pyrites, etc., were received and examined this season as compared with twenty-three last season.

**Limestones, Marls, and Lime:**—Four samples of materials of this nature were analyzed this season as compared with nine last season.

**Assays for Gold and Silver:**—No samples were assayed this season as compared with six last year.

**Ashes (wood, etc.):**—No samples this season as compared with two last year.

**Miscellaneous:**—One each, clay for silica, boiler scale, pigeon manure, phosphate rock, rock for iron, pyrites for copper, copper iron wire for Engineering Department, base goods, Referee potash sample for Association of Official Agricultural Chemists, potash made by United States Industrial Chemical Co; two each, wool waste, phosphate rock and acid, compost; three A. O. A. C. Referee samples for starch; six A. O. A. C. Referee samples, feeds; seven drinks for alcohol, analysis authorized by the Governor of the State; four toxicological analyses in cases of suspected poisoning of human beings.



**Distribution of the Work:**—The fertilizer analyses were made by Messrs. \*R. M. Simpson, J. T. Foy, and B. Freeman. The samples were prepared for analysis by Mr. Freeman with the assistance of a helper in the grinding.

All of the nitrogen work, including total, water-soluble, and availability determinations, was done by Mr. Simpson.

All of the water analyses were made by Mr. Freeman.

Mr. Freeman made the analyses of limestones and like materials, and the miscellaneous analyses, with the exception of one poison case by Mr. Robertson.

Nearly all of the Experiment Station work has been done by Prof. J. H. Mitchell and Mr. D. B. Roderick, though all of the assistants above mentioned have taken part in some of the work.

It gives me pleasure to be able to say that all of the work has been faithfully and efficiently performed, and that a spirit of loyalty and co-operation has prevailed.

Respectfully,

R. N. BRACKETT, Chief Chemist.

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\*In place of Mr. B. F. Robertson on sick leave.



## REPORT OF THE STATE CROP PEST COMMISSION

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Mr. S. B. Earle, Acting President.

Clemson College, South Carolina.

Dear Sir:

We herewith submit report on the operations of the South Carolina Crop Pest Commission for the year 1925:

These operations are our chief safe-guard against the introduction and spread of serious insect pests and plant diseases which are not now wide-spread within the state, and they constitute a highly important protection to our agriculture. A total of about 400 inspections of trees and plants were made within the state, 570 colonies of bees were examined for disease, and 92 samples of insecticides were analyzed by the Chemical Department in its cooperation with the Commission. A total of more than 144,000 tags were issued to cover the shipments of trees, plants, etc., within the state. Many miscellaneous services were performed in addition to those here summarized.

### INTRASTATE NURSERY ACTIVITIES

Due to the increased interest in the development of nurseries and to the home growing of plants within the state, the demands made upon the State Crop Pest Commission for inspection services during the past year were much greater than heretofore.

The principal pests found have been Crown Gall and Root Knot, both of which have given us considerable trouble, necessitating in some instances as many as four or five inspections during the season. The Commission in the operation of this service pursues its well known policy of helpfulness. Sometimes it is necessary in the performance of our duties to cause a loss to the growers, but whenever such loss can be avoided by reasonable assistance, no efforts are spared to help the nurserymen or growers of plants. In the case of crown gall and root knot when a nursery is found not generally infested, instead of condemning the entire lot of nursery stock, it has been, and still is the policy of the Commission to inspect at digging time, and personally supervise the sorting out and destroying the diseased plants. This is also true of any other disease or insect trouble.

In past years one of our greatest problems has been that of educating the people to the point where they realize the importance of using every precaution in preventing the introduction and spread of dangerous insects and diseases and the value of planting only clean healthy trees and plants. We feel that we can say with certainty that the people are realizing this more and more each year and that they now understand that the efforts of the Commission are to promote their welfare and for their protection rather than detrimental in nature.

The commission as in past years requires that all nurseries be inspect-



ed at least once a year and the proper cerification of the stock made before shipments go forward. Before these certificates are issued the trees and plants must be apparently free of insects and diseases and the nurseries must have facilities for fumigation.

The intra state regulations have not changed since last season and the nurserymen are required as previously to file in the office of the Commission at the end of each day's business a duplicate invoice of he shipments made that day, that we may have an accurate record at all times just where each shipment of stock has gone. These invoices must give the numbers of the South Carolina permit tags used, and all unused tags must be returned at the end of the season.

During the past season 10,939 permit tags were issued to nurserymen within this state. Sixty-five properties were inspected for nursery stock for the season 1924-25, which gives an increase of twelve properties more than last season.

Following is a list of nurseries active within this state during the past season.

Ellis, F. E., Level Land,	Smith, Mrs. H. G. Burgess
Harkness, J. B., Antreville	Camden Floral Co., Camden
Kay, R. D., Due West	Guion, L. I., Lugoff
Bates, R., Jackson	Newton, E. C, Tatum
Bush, James, North Augusta	Keitt, Mrs. Thos. W., Newberry
Atkinson, F. S., Augusta	Brazeale, Mrs. D. B., Westminister
Darnell, R. L., Williamson	Gillison, Mrs. Paul, Seneca
Fant, Rufus, Anderson	Hunter, S. C., Westminister
Lockwood, A. L., Anderson	Vollarath, L. J., West Union
McGee, M. A., Anderson	Jones, Anniebelle, Westminister
McAllister, Mrs. Daisy, Anderson	Mellotte, H., Mountain Rest
Fogle, C. W., Denmark	King, Mrs. Q. P., Seneca
Wannamaker, J. E. Jr., St. Matthew	King, Mrs. W. E., Seneca
Evans, Harold D., Elloree	Stone, Mrs. E. L., Seneca
Hamlin, T. R., Mount Pleasant	Vaughan, Miss Minnie, Walhalla
Hastie, C. N., Charleston	Dantzler, M. O., Orangeburg
Fruit Hill Nursery, McBee	Evans, H. D., Elloree
Day, P. B., Trenton	Fairey, J. A., Rowesville
Tillman, B. R., Trenton	Watson, W. W., Orangeburg
House, DeWitt, Florence	Carson, Mrs. S. V., Central
Bell, Carlyle, Greenville	Dean, C. L., Central
Gaskin, G. C., Greenville	Edens, W. E., Pickens
Greenville Nursery Co., Greenville	Baldwin, Geo., Columbia
Gillespie Nurseries, Taylors	Wilson, W. J., Columbia
Taylor Nurseries, Taylors	Rucker, Mrs. P. J., Columbia
Davis, John O., Ware Shoals	Spartanburg Nursery, Sparanburg
Hampton Nursery Co., Hampton	Wood, J. W., Duncan
Sanders, Geo. Fairfax	Senn, Mrs. L. E., Mayo
Evergreen Nurseries, Conway	Bird Mountain Co., Landrum
Stuckey, Mrs. C. W., Nesmith	



The calls for inspection of home grown plants increased considerably over last season due partially to the gradual dissemination of information among the people in the remote sections of the various counties, but probably due chiefly to the refusal of the common carriers to transport plants that were not accompanied by permits. This sort of inspection work has required considerable time on the part of the inspectors because there is no possible way of determining in advance who will require the service and schedules cannot be worked out so that all the inspections in a particular locality can be made at the same time as in the case of our regular nurseries. An apparent duplication of travel therefore, in many instances is almost impossible.

The Commission has adopted the policy in the case where a person has only a few plants, to have these bundled securely and forwarded to this office for inspection. Considerable inspection service is handled in this way during the season, at a saving of considerable time and expense.

In previous years we have had numerous calls from county agents for authority to inspect small shipments of plants for people who wish to send only a few to some friend. It can readily be seen that such shipments would not warrant the time and expense necessary for an inspector of the Commission. After careful consideration of all problems involved the Commission in order to meet this emergency issued a permit tag to be supplied to county agents for shipments within the state only. It was deemed advisable that all shipments going out of the state should receive the attention of a regular inspector. It is required of the county agents at the time the shipment is made that the stub attached to this tag be filled out and returned to this office.

The greenhouses of the various floral companies are inspected periodically once a year and more when necessary. To date we have not found any serious insect pests and plant diseases attacking greenhouses grown plants. Florists of course have their own particular troubles and often call upon the Commission for advice in the control of the more common diseases and insects. Certificates are issued when necessary but this is required only when the greenhouse deals with certain woody shrubs or trees or certain kinds of herbaceous flowering plants. Below is a list of the greenhouses within the state, all of which get one or more inspections each year.

- Bush's Greenhouse, North Augusta
- Hite Floral Co., Aiken
- Anderson Floral Co., Anderson
- Fant's Greenhouse, Anderson
- Carolina Floral Co., Charleston
- Magnolia Floral Co., Charleston
- Palmetto Floral Co., Charleston
- Floral Hill Gardens, Mount Pleasant



Greenville Floral Co., Greenville  
Gilliam's Floral Co., Greenville  
Graceland Cemetary & Floral Co., Greenville  
Cureton, J. P., Greenwood  
Camden Floral Co., Camden.  
Hollywood Greenhouse, McColl.  
Euclaire Greenhouses, Columbia.  
Eison, Mrs. J. M., Columbia.  
Wales Garden Greenhouses, Columbia  
Rose Hill Greenhouse, Columbia.  
Moss, Chas. A., Spartanburg.  
The Glenn-Ayers Floral Co., Spartanburg.

### INTERSTATE NURSERY ACTIVITIES

The interstate movement of nursery stock, as mentioned in previous reports of this Commission, comprises by far the greater part of the nursery business in South Carolina. The regulations regarding interstate shipments have not changed since last season.

During the season 1924-25 considerably more interest was taken by outer-state nurseries in the appointing of acceptable persons in this state upon whom service of process may be served in case nursery stock does not come up to the requirements as recommended. We had several cases last season in which crown gall showed up in commercial orchards, on land that had not been in fruit trees before. It was almost a positive fact that the nursery stock was infected when put out though this could not be definitely be proven. The Commission is constantly trying to impress upon the purchasers of large quantities of nursery stock the importance of either having this stock inspected when received or of buying only from nurseries who have met all of the requirements fully so that they might have some basis for action later should the trees not come up to the standard. In such cases the Commission has rendered all the help possible, but unless it has some definite basis to work on its hands are more or less tied, especially when such cases usually do not come up until two, three or more years later.

Duplicate invoices are required, as in previous years, of all shipments of nursery stock coming into the state and in so far as possible all of the larger shipments are inspected when they reach their destination. If badly infested shipments are found they are either returned or destroyed. We have received splendid cooperation on the part of the outer-state nurserymen and in very few cases have we found stock so severely infested as to necessitate refusal of acceptance.

During the season just closed this Commission issued 34,070 permit tags to out of state nurseries. A list of these nurseries is given below. This list shows the widely separated points in the United States from



which nursery stock is received and will give some idea of the importance of closely watching entry of all plants, because many of these states have insect and disease problems peculiar to their own section.

Many of these diseases and insects are not now known to occur in South Carolina and if introduced would cause inestimable injury to the industry. When one knows the immense amount of loss occasioned by some of our insect pests and plant diseases which were established before there were quarantine regulations, one can fully realize the importance of careful watchfulness to safe guard and protect the interest of our own state.

#### Outer State Nurseries

Conard & Jones, West Grove, Pa.  
Vaughan's Seed Store, Western Springs, Ill.  
Thomasville Nurseries, Thomasville, Ga.  
Collinsville Nursery Co., Collinsville, Aa.  
LaGrange Greenhouse, La Grange, Ga.  
The Schmidt & Botley Co., Springfield, Oo.  
Harlan Farms Nursery, Lockhart, Ala.  
Woodlawn Nurseries, Rochester, N. Y.  
The Newton Nursery, Newton, N. C.  
Bass Pecan Co., Lumberton, Mass.  
The Wagner Park Nursery Co., Sidney, Ohio.  
Florida Nurseries, Monticello, Fla.  
Catawba County Nursery, Newton, N. C.  
Valdesian Nurseries, Bostick, N. C.  
Reasoner Bros., Ousco, Fla.  
Robert C. Young, Greensboro, N. C.  
Old Dominion Nurseries, Richmond, Va.  
Virginia Nurseries, Richmond, Va.  
Hick's Nurseries, West Bury, N. Y.  
The Westminister Nursery, Westminister, Md.  
The Howard Hickory Co., Hickory, N. C.  
Fraser Nurseries, Inc., Birmingham, Ala.  
Summit Nurseries, Monticello, Fla.  
Howell Nurseries, Knoxville, Tenn.  
Ashford Park Nurseries, Atlanta, Ga.  
Maloney Bros. Nursery Co., Danville, N. Y.  
Crawford Nurseries, Concord, Ga.  
Killian Nurseries, Newton, N. C.  
The Empire Farm & Nursery Co., Baileyton, Ala.  
The Munson Nurseries, Denison, Texas.  
The Tennessee Nursery Company, Cleveland, Tenn.  
Fort Payne Nursery Co., Ft. Payne, Ala.



- J. H. Skinner & Co., Topeka, Kans.  
C. C. Dorn, Augusta, Ga.  
Wight Nursery & Orchard Co., Cairo, Ga.  
Bildad Nursery Co., Smithville, Tenn.  
Southern Nursery Co., Winchester, Tenn.  
J. Van Lindley Nursery Co., Pomona, N. C.  
Dixie Wholesale Nursery, Marieta, Ga.  
Southern Nut Tree Nurseries, Thomasville, Ga.  
Rock Hill Nursery, Wellborn, Fla.  
Milledgeville Nursery Co., Inc., Milledgeville, Ga.  
Biloxi Nurseries, Biloxi, Miss.  
Willis Nurseries, Ottawa, Kan.  
Marble City Nursery Co., Knoxville, Tenn.  
Huntsville Wholesale Nurseries, Huntsville, Ala.  
Jackson & Perksons, New York, N. Y.  
Stark Bros. Nurseries & Orchard Co., Louisiana, Mo.  
Washington Heights Nurseries, Knoxville, Tenn.  
Neosho Nurseries, Neosho, Mo.  
West Hill Nurseries, Inc., Fredonia, N. Y.  
Glen St. Mary's Nursery Co., Glen St. Marys, Fla.  
Cumberland Valley Nursery Co., McMinnville, Tenn.  
Shenandoah Nurseries, Shenandoah, Iowa.  
Easterly Nursery Co., Cleveland, Tenn.  
Harrison's Nurseries, Berlin, Md.  
H. G. Hasting's Co., Atlanta, Ga.  
Thomas B. Meehan Co., Drsher, Pa.  
Forest Nursery Co., McMinnville, Tenn.  
W. N. Scarff & Son, New Carlisle, Ohio.  
Peter Bohlender & Son, Tippecause City, O.  
Henry A. Dreer, Riverton, N. Y.  
Commercial Nursery Co., Deborah, Tenn.  
Davenport Guerry, Rivoli, Macon, Ga.  
LaFayette Nursery Co., La Fayette, Ga.  
Lumberton Nurseries, Lumberton, Miss.  
Audubon Nursery Co, Wilmington, N. C.  
The Atto Nursery Co., Shipman, Va.  
McKay Nursery & Orchard Co., Lucedale, Miss.  
Magnolia Nursery, Cairo, Ga.  
The Hill Nursery, Augusta, Ga.  
John Lewis Childs Seed Co., Inc., Floral Park, N. Y.  
The Har Nurseries, Hartwell, Ga.  
Eatonton Nurseries, Etonton, Ga.  
Citronelle Nursery & Orchard, Citronelle, Ala.  
The C. A. Dalh Co., Atlanta, Ga.  
B. W. Stone, Thomasville, Ga.



W. B. Lamar, Monticello, Fla.  
Lone Star Gardens, Thomasville, Ga.  
Mapleville Nurseries, Maplewood, Ill.  
Cornelia Nursery Co., Cornelia, Ga.  
Pineapple Pear Nursery & Orchard Co., Atlanta, Ga.  
Borns Pecan Farm & Nursery Co, McRae, Ga.  
G. P. Jackson, Baconton, Ga.  
John H. Wolf, Deland, Fla.  
J. M. Bacon Pecan Groves, Inc., DeWitt, Ga.  
Fruitland Nurseries, Augusta, Ga.  
Carol Plantations, Inc., Theodor, Ala.  
Alabama Summit Nurseries, Foley, Ala.  
J. R. & J. B. Miller, Bacanton, Ga.  
Joe Shadow Nursery Co, Winchester, Tenn.  
H. M. Broach Nurseries, Putney, Ga.  
G. W. Jointer & Son, Statesboro, Ga.  
Cedar Hill Nursery & Orchard Co, Winchester, Tenn.  
Templin Crockett-Bradly Co., Cleveland, Ohio.  
Deaton Nurseries, Vass, N. C.  
Geo. W. Thomas, Marion, Ala.  
Kelsey-Highlands Nursery, East Boxford, Miss.  
Authur J. Collins & Sons, Morristown, N. J.  
R. & J. Farquhar Co., Boston, Mass.  
Verkades Nurseries, New Landon, Conn.

#### Dealer's Credentials

In the past years we have always had trouble with the common fruit tree agents going about through the country selling trees and often times making unwarranted claims for their particular trees in order to induce people to buy. We have tried to educate the people to the point where they will buy only and direct from reputable nurseries. There is, and probably always will be fruit tree agents, however, so the Commission requires an affidavit from every agent selling nursery stock in South Carolina, stating what nursery grows the stock he is offering for sale and to what points in South Carolina this stock is delivered. These grounds are inspected to see that there are no chances of this stock being reinfested before reaching its final destination. After the dealer has filed this office an acceptable affidavit he is then issued a dealer's credential which must be carried at all times and presented upon request. This will enable the inspectors or the purchasers of nursery stock to see whether this dealer has a right to operate within the state and whether the nursery from which he is selling stock is approved by the State Crop Pest Commission.



### Sweet Potato Inspection Service

Owing to the rapidly increasing sweet potato industry in this state the responsibility of the Commission has been greatly increased in its efforts to prevent the introduction and spread of dangerous insects and diseases. The regulations of the Commission require that three inspections be made before potato plants can be offered for sale. During the past season the Commission made a total of 270 inspections for sweet potatoes alone with all indications for an increase for the season 1925-26. During these inspections the inspectors have given considerable time in advising with the growers as to the importance of producing potatoes free of disease in addition to information sent out from the office from time to time in the form of news letters, information thru county agents and the press in general.

The disease known as wilt has been a little more noticeable this season in the Piedmont section of the state due probably to the excessive drought. In cases where there were only a few hills of this disease we have personally helped the growers in such a way that we believe insure clean plants for another season. Usually we do not recommend this procedure, but the crop has been exceedingly short this season, and in accordance with the policies of the Commission we wished to lend a helping hand as much as possible. In five cases the disease was so prevalent that the entire plantings were condemned and we advised the purchasing of plants or seed potatoes for next year that are known to be free of wilt or other injurious diseases. We have received splendid cooperation from the growers and they are showing marked interest in the treatment of the beds and the potatoes before bedding and in carrying out the other regulations of the Commission. During the season entry of plants from several concerns from other states were forbidden due to the fact that they had not met the requirements of the Commission. This holds true of several growers in this state who failed to comply. While there is frequently some opposition when permits are denied, the better class of growers and dealers have cooperated fully with the Commission and have shown a willingness to comply with all the requirements when the situation is explained to them.

There is a source of danger that we have, so far, not been able to eliminate. This is the bringing across state boundary lines potato plants on trucks, in so far as possible we have made inspection during the season of all the plants offered for sale in the border towns. We have intructed the plant dealers in these towns as to the importance of purchasing only plants hat have the inspection tag attached and nope in this way to reduce this danger to a minium.

There was this season an increase of 25 properties that required inspection, making a total of 90 as compared with 65 for last sason.



Total inspections for the season were 270. Thirty-six thousand seven hundred and eleven permit tags were issued during the season. The hundred and seven permit tags were issued during the season. The intra and inter state regulations for potato plants are the same. Below is a list of the inter and intra state shippers of potato plants who did business in South Carolina during the last season.

#### Sweet Potato Growers of South Carolina

H. C. Jordan, Aiken.	W. H. McJunkin, Westminister.
J. P. Guess, Appleton.	S. D. Hunter, Westminister, Rfd.
R. L. Darnell, Williamston.	J. L. King, Westminister, R. F. D.
Virgie F. Manuel, Ulmers.	G. T. Hawkins, Madison.
Dr. O. K. Briggs, Barnwell.	T. R. Jenkins, Westminister.
M. H. Fripp, Ridgeland, R. F. D.	W. T. Hardin, Westminister, Rfd.
R. S. Montague, Mt. Holly.	C. J. Mulky, Westminister, R. F. D.
Shep Pearlstine Co., St. Matthews.	J. M. Davis, Westminister.
J. Swinton Whaley, Little Edisto.	T. M. Dantzler, Parler.
W. T. Parker, Myers.	J. C. Till, Orangeburg.
J. C. Terrell, Cheraw.	Harry Bozard, Orangeburg.
W. D. Allen, Summerton.	R. L. Zeigler, Orangeburg.
C. B. Kendall, Lamar.	G. N. Foy, Vance.
W. P. Shuler, St. George.	D. T. Holt, Wateree.
Andrew Westbury, St. George.	W. C. Kelley, Congaree.
Rob't V. Ackerman, M. D., Ridgeway	Wm. DuBose, Monetta.
J. W. Mellard, Jedburg.	T. M. Burgess, Pacolet.
Wm. J. Simmons, Summerville.	A. A. Mathis, Pacolet.
Jas. W. Nettles, Summerville.	B. S. Haynes, Pacolet.
R. B. Simmons, Summerville.	J. W. Cox, Greer, R. F. D. 4.
D. F. Jamison, Summerville.	W. E. Miller, Moore, R. F. D. 1.
Thos. H. Edwards, Mars Bluff.	J. Horton Settle, Inman, R. F. D. 1
J. D. Platt, Georgetown.	T. W. Plemmons, Duncan.
C. B. Loftis, Taylors.	B. R. Ledbetter, Campobello.
C. G. Bell, Greenville, R. F. D.	Mrs. R. V. Mason, Scotia.
Piedmont Plant Co., Greenville.	Maner B. Robert, Scotia.
W. S. Roper, Greenville.	PotatoWarehouse Co., Varnville.
B. T. Dominick, Greenwood, Rfd.	Thos. G. Kittles, Garnett.
N. H. Davis, Greenwood, R. F. D.	C. E. Perry, Ridgeland.
S. J. Thompson, Greenwood.	Jaudan Bros., Tillman.
E. P. Rhodes, Greenwood, R. F. D.	W. E. Pardae, Lancaster.
J. L. Mayer, Ninety Six.	Joe Leake, Clinton.
Lee O'Dell, Hodges, R. F. D. 3.	J. B. Hill, Ware Shoals, R. F. D.
G. T. Asbill, Ninety Six.	J. A. Bailey, Clinton.
Lawrence Powell, Walhalla, R. F.	W. R. Parker, Troy.
W. T. Senn, Senaca.	H. A. Brailsford, Pinewood.
Jesse Elrod, Westminister, R. F. D.	A. M. Taylor, York.
S. A. Tow, Walhalla, R. F. D.	R. E. Wingate, Rock Hill, R. F. D.



W. B. Wilkerson, Hickory Grove.

E. C. Croxton, Rock Hill.

Prof. L. G. Moore, Rock Hill, R. F.

T. B. Quinn, Rock Hill, R. F. D. 2.

C. H. Ferguson, Clover.

H. A. Quinn, Clover.

### GEORGIA

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|-------------------------------------|------------------------------------|
| Ahe, C. S., Baxley.                 | Hair, J. T., Graham.               |
| Altman, E. A., Baxley.              | Hamby Plant Co., Valdosta.         |
| Adams, W. S., Seville.              | Hunter, Thomas, Baxley.            |
| American Plant Co., Alma.           | Hollis, G. E., Baxley.             |
| Brooks, R. J., Baxley.              | Hilton, S. F., Baxley.             |
| Blakeley Farms, Blakeley.           | Jefferson Farms, Albany.           |
| Brigman, J. H., Baxley.             | Lambert, Dr. E. A., Denton.        |
| Batten, J. R., Hickox.              | McDowell, T. H., McIntosh.         |
| Barber, D. M., Baxley.              | Mansor Plant Co., Valdosta.        |
| Bennett, T. H., Rockinham.          | Malcom Plant Co., Ty Ty.           |
| Bland Plant Company, Baxley.        | Myers Seed & Plant Co., Tifton.    |
| Boatwright, W. H., Rockinham.       | Myers, C. B., Baxley.              |
| Brannen Bros., Baxley.              | Moody, Otto, Baxley.               |
| Barber, J. G., Rockinham.           | Mullins Plant Co., Douglas         |
| Brooks County Pl't Farm, Barwick    | Morris, R. M., Surrency            |
| Branch Plant Co., Baxley.           | Purity Farms, Douglas              |
| Bennefield, J. N., Tifton.          | Parson Plant Co., Pearson          |
| Bennett, W. L., Hahira.             | Purcell, J. G., Baxley             |
| Barrs, J. R., Hahira.               | Pitts & Clemens, Doerun            |
| Bowers, LeRoy, Baxley.              | Piedmont Plant Co., Albany         |
| Bowen, J. W., Baxley.               | Phillips, M. P., Alma              |
| Cauthen, E. A., Fender.             | Smith, Johnie, Baxley              |
| Cowart, J. B., Collins.             | Stokes, F. F., Fitzgerald          |
| Cribb, Mrs. W. S., Nichols.         | Sellers, Jno. M., Baxley           |
| Crisp, J. H., Fender.               | Sword, John, Omega.                |
| Cooper Plant Co., Baxley.           | Salter, H. D., Pitts               |
| Crane, J. B. Plant Co., Dixie.      | Sumner, H. C., Omega               |
| Carlisle Seed & Plant Co., Valdosta | Schroer Plant Co., Valdosta        |
| Cameron, A., Rockingham.            | Turner, G. W., Baxley              |
| Davis, J. T., Tifton.               | Tifton Potato Co., Tifton          |
| Deen, D. H., Baxley.                | Wilson, H. F., Rebecca             |
| Deen, Victor, Baxley.               | Walters, Geo. L., Baxley           |
| Evans, H. Grady, Graham.            | Winn, T. D., Thomasville           |
| Farmers Co-op. Co., Homeland.       | Wrench, T. W., Folkston            |
| Fillgan, J. D., Ty Ty.              | Wolf, R. S., Baxley                |
| Fullwood, P. D., Tifton.            | Waughtel, C. W., Homeland          |
| Fossett Plant Co., Baxley.          | Williams, J. H., Coffee            |
| Gantt, W. M., Hazelhurst.           | Walker, J. H., Lenos               |
| Horton, G. G., Baxley.              | Williams, W. W. Q., Quitman        |
| Hambrick, J. S., Ray City.          | Williams Plant Co., Baxley         |
| Hicks, G. S., Baxley.               | Williams, T. S., Starke, Fla.      |
| Herrington, R. N., Baxley.          | Whitby Farm Co., Tallahassee, Fla. |



### CABBAGE AND TOMATO PLANT REGULATIONS

During the season the regulations on cabbage plants were lifted, it having been found that there was very little, if any, danger of bringing in diseases on the seed when they come from reliable sources, and are properly safeguarded against disease. Most of the cabbage plant shipments go out of South Carolina instead of coming in and none of the serious diseases have been found in the cabbage plant growing district of this state.

The regulations on tomato plants are still in force and some 15 or 20 properties were inspected during the season. No serious diseases have ever been found in the seed bed. These plants, however, are rarely grown in larger quantities than a few window boxes, the surplus being offered for sale. There are a few plant growers in the trucking section who grow quite a few for sale. It is still the practice of the Commission to issue rubber stamps and parcel post labels for the shipment of these plants instead of requiring them to purchase the regular permit tags, thus saving the growers much time and expense and still offering the public adequate protection.

### COTTON SEED REGULATIONS

The Commission still requires the grower of cotton seed for planting purposes to file in this office, before offering for sale an acceptable affidavit stating that in case of staple cotton less than 5 percent and in case of short staple cotton less than 1 percent of the bolls in the field of cotton from which the seed were taken showed evidence of the presence of anthracnose and also that they are free of wilt. During last season 60,382 such permit tags were issued by this Commission.

### BEE DISEASES

The bee disease regulations prohibiting the shipment into this state of any bees or bee hives or beekeeping fixtures of any kind unless accompanied by an unexpired permit of the South Carolina State Crop Pest Commission have not been changed during the past year, though the latter part of the season there occurred in several localities in Anderson County the disease known as American Foul Brood. This disease was presumably introduced into the State through the sale of honey from infected apiaries, the empty cans then thrown on the dump pile and the bees forced through lack of honey flow due to the extended drought, to eat the residue left in these cans, and in this way introducing the disease into the hives. Thirteen colonies in the infected apiaries were burned and it is hoped the disease has been eradicated. This, however, cannot be ascertained until next spring when the weather warms up sufficiently to permit the examination of all the colonies in the vicinity of these infested apiaries. During the latter part of the season about 500



colonies were inspected and no further trace of the disease found.

The Commission still requires that all queen rearing apiaries and apiaries from which bees are sold be inspected every 60 days. During the season 570 colonies of bees were so inspected, and certificates issued for the sale of queen and package bees.

#### **MEXICAN BEAN BEETLE**

Although this insect has ceased to be primarily a quarantine problem, still the members of this Commission are called upon frequently to make inspections and certify as to freedom of string beans and peas from this insect and permit issued before some of our neighboring states will accept them. Numerous inspections were made in the trucking section of this state during the past season and 2,000 permit tags were issued. The Mexican bean beetle fortunately has adhered rather closely to the Piedmont section of the state, though has spread rather rapidly northward.

#### **PESTS OF OTHER STATES**

Among the pests of other states against which the Commission is constantly on watch to prevent introduction into South Carolina is the Sweet Potato Root Borer occurring in the southern parts of Florida, Alabama, Mississippi and Louisiana and eastern Texas; the European Corn Borer occurring in Maine, New Hampshire, Vermont, Rhode Island, New York, Ohio, Pennsylvania and Michigan, and a large infested area in Canada; the Japanese Beetle occurring in New Jersey, Pennsylvania and Delaware; the Pink Boll Worm occurring in the United States only in parts of Texas, (the infestation formerly found in Louisiana and New Mexico having been apparently successfully eradicated); and the Japanese Camphor Scale which at present is confined only to parts of Louisiana. The quarantine regulations of the South Carolina State Crop Pest Commission against these insects conform to those of the Federal Government. products from the quarantined areas coming only under permit of the Federal Horticultural Board, after proper inspections have been made.

#### **INSECTICIDE AND FUNGICIDE ACT**

Under the Insecticide and Fungicide Act the law states specifications for calcium arsenate as to density and arsenic content and that the material can be tested free of charge by sending samples to this Commission. Numerous samples collected either by agents of the Commission or sent in by parties throughout the state were examined in the laboratory of the State Chemist. During last season 92 samples of calcium arsenate were tested and the only samples found to be below the requirements were those carried over from the year before and some even from the year previous to this. This gave an increase of 22 samples over last season. As in previous years when it was found that the density did not seem to correlate with dustability the material was always tested through an approved dusting machine before being condemned.



**NEW QUARANTINE**

During the latter part of this season the fact was brought to the attention of the Crop Pest Commission of the unusual damage to the Irish potato crop along the eastern shore of Virginia caused by the insect known as the Potato Tuber Moth. The fact was ascertained that seed potatoes were being shipped from Virginia to New Jersey and then re-shipped to the trucking section of South Carolina. In view of the fact that this insect is not known to occur in the trucking section and that in favorable years should it became established may cause considerable damage, the Commission deemed it advisable to prohibit the shipment into South Carolina of potatoes from the infested states. The following regulations was therefore promulgated to become effective on and after November 1, 1925.

Regulations IP-1. In order to prevent the introduction of the Potato Tuber Moth (*Phthorimaea operculella* Zell) the importation or movement into the state of South Carolina of Irish potato seed for propagating purposes from the states of Virginia, Maryland, New Jersey, Delaware or other states that may hereafter be found to be infested is hereby prohibited, except, when accompanied by a permit of the state entomologist or corresponding official of the state of origin setting forth the fact that the potatoes come from territory known not to be infested with the Potato Tuber Moth.

Respectfully submitted,

H. W. Barre,

State Pathologist.

Franklin Sherman,

State Entomologist



## REPORT OF STATE VETERINARIAN

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Mr. S. B. Earle, Acting President,  
Clemson Agricultural College,  
Clemson College, South Carolina.

Dear Sir:—

I have the honor to submit herewith a report covering the activities of the Clemson College Livestock Sanitary Department and the Bureau of Animal Industry, U. S. Department of Agriculture, cooperating, in the State of South Carolina, for the year ending June 30, 1925.

This department, as is well known, is maintained for the purpose of affording proper protection to the livestock industry of the State from all infectious, contagious and communicable diseases. Our major functions, however, are Tick Eradication, Tuberculosis Eradication and Hog Cholera Control. An outline of our activities will be given in the following order:

### **Tick Eradication**

This class of work has been completed except in the counties of Hampton, Jasper, Beaufort, Colleton, Dorchester, Charleston, Berkeley, Williamsburg, Georgetown and Horry, in which systematic work is being conducted and splendid results are being obtained. We anticipate the freeing of the greater portion of the quarantined areas with this season's work. The long prevailing custom, however, of cattle owners turning their livestock at large during the fall and winter months is a very serious handicap to the work for the reason that tick infested animals are apt to roam over large areas and reinfest territory previously freed of ticks. This condition makes it necessary to re-work certain areas each year until we are absolutely sure that a complete eradication has been accomplished.

While the interest in cattle production has been on the wane during the past year, due in a large measure to unsatisfactory markets and stringent financial conditions, yet the industry is of no mean proportion, is today one of our most important industries and it is predicted that a general re-awakening will occur in the very near future.

The eradication of the cattle fever tick makes importation of new blood, in the shape of pure-bred sires, safe in practically all areas of the State and the resultant establishment of an industry both pleasant and profitable.

### **Tuberculosis Eradication**

The work of Tuberculosis Eradication is confined principally to the bovine species and while this project is in its infancy, so to speak, yet



the development has assumed wonderful proportions owing to its economic and public health value. The transmissibility of tuberculosis to the human, especially children, through the medium of milk from tuberculosis cows, is no longer questioned by the leading scientists and students of the subject, therefore, the conduction of this class of work is most important until the disease has been completely eradicated from our State.

The "Accredited Herd" plan of testing has been featured since the inauguration of the work and as a result the larger percent of the breeding and dairying herds in the State have been tested under our supervision. A large amount of "community" testing has also been done and this class of the work is being encouraged with the expectation of enlarging the areas to the extent of taking in entire counties as units under the "Area Plan" of testing and expanding the work as our funds will permit until the entire area of the State has been freed of bovine tuberculosis.

During the past year the tuberculin test was applied to a total of 1,969 herds containing 17,997 head of cattle, 109 of which reacted to the test and were disposed of in accordance with State and Federal laws.

On July 1, 1925, we had a total of 177 herds containing 5,497 cattle on the Accredited Herd list; 827 herds and 9,807 cattle that have passed one free test and a grand total of 5,798 herds and 31,992 cattle under our supervision.

### Hog Cholera Control

The diminution in the number of hog cholera outbreaks in the State during the past year was very marked as compared to former years. The greater number of outbreaks, as in the past, were in the coastal plain region where the farmers permit their hogs freedom of range the greater part of the year. The outbreaks, however, were controlled in a very short time.

We regret to state that our farmers are not giving swine production the attention they should, and in a like manner are not employing the serum and virus inoculation method as a preventive against cholera. We fear that this may occasion serious outbreaks in some sections during the fall and winter months.

### Other Diseases

In addition to our three major projects, viz: Tick Eradication, Tuberculosis Eradication and Hog Cholera Control, this department, by request, makes numerous investigations of conditions in livestock that are apparently of an infectious or contagious nature; in some instances, however, they prove not to be. When it is determined that the condition is infectious or contagious, proper control measures and treatment are employed. Our activities during the past year in this connection are summarized as follows:



## SUPPLEMENTARY REPORTS

Number of diseases investigated in cattle .....	101
Number of diseases investigated in swine .....	301
Number of diseases investigated in horses and mules .....	71
Number of diseases investigated in sheep and goats .....	2
Number of diseases investigated in dogs .....	16
Farms or premises visited in making investigations .....	3,767
Interviews with farmers or others on matters pertaining to Livestock Sanitary Work .....	10,232
Miles traveled by rail in answering calls .....	28,851
Miles traveled by other means in answering calls .....	63,041
This department also through the medium of letters, bulletins, pamph- lets, etc., distributes a great amount of valuable information concerning the various diseases of livestock and suggests national methods of treat- ment.	

## Laboratory Service

The establishment of this branch of our department has proven its worth and is a wonderful adjunct to our other lines of work. The service rendered is greatly appreciated by the livestock and poultry owners and there is an ever increasing demand for service.

During the past fiscal year a total of 1,756 specimens from all classes of animals and birds were examined. The class and number of specimens from each are as follows:—

Cattle .....	925
Chickens .....	502
Sheep .....	139
Swine .....	68
Dogs .....	64
Horses and Mules .....	29
Pigeons .....	14
Turkeys .....	10
Cats .....	3
Rabbits .....	1
Goats .....	1
Total .....	1,756

## Serum, Virus and Biologics Distribution

Our equipment permit us to carry a large supply of anti-hog cholera serum, virus and various biological products used in our work as preventive treatments for various conditions. All are sold to the livestock



owners at cost and effect an annual saving of several thousand dollars.

Our sales during the past year were as follows:—

	Mils	Value
Anti-hog cholera serum .....	1,857,225	\$18,572.25
Hog Cholera virus .....	116,780	1,167.80
Biologics .....	11,807	2,280.00
Syringes, etc. ....		108.57
Total .....		\$22,128.62

### Deputy State Veterinarians

That our livestock industry may receive the greatest possible protection, twenty-five practicing veterinarians located in various sections of the State are commissioned as Deputy State Veterinarians, to assist our regular force of veterinarians, if their services should be needed, in controlling any outbreak of a disease in livestock that is of an infectious or contagious nature. This arrangement has obtained for the past few years and has proven most satisfactory.

### New Regulations

Owing to an outbreak of European Fowl Pest among poultry in some of the Eastern, Northern and mid-western States during the fall and winter months it was deemed advisable to issue a quarantine against this disease as a protection to our poultry industry. The quarantine became effective December 29, 1924, and as the disease was under control within a few months we amended the quarantine order May 15, 1925, so as to permit shipments of live poultry into our State in accordance with U. S. Bureau of Animal Industry regulations controlling.

The cattle tick quarantine established in the entire area of Berkeley County and north-eastern portion of Charleston County, May 15, 1924, was amended effective April 1, 1925, so as to permit the conduction of tick eradication work in accordance with the controlling laws and regulations.

### Expenditures in all Livestock Sanitary Work Projects

	U. S. Bureau Animal Industry	State of South Carolina
July 1, 1924, to June 30, 1925, inclusive .....	\$55,740.97	\$69,370.25



**FORCE IN LIVESTOCK SANITARY WORK**

(Paid jointly by State of South Carolina and U. S. Dept. of Agriculture)

Name	Title.	Address
W. K. Lewis .....	Inspector in Charge & State Veterinarian.....	Columbia, S. C.
Clarke Hedley .....	Assistant Veterinarian	Conway, S. C.
E. J. Meixel .....	Assistant Veterinarian	Charleston, S. C.
D. J. Bynacker .....	Assistant Veterinarian	Kingstree, S. C.
C. W. Chapin .....	Junior Veterinarian.....	Beaufort, S. C.
S. H. Williams .....	Agt. Tick Eradication	Georgetown, S. C.
G. S. Cuthbert.....	Agt. Tick Eradication	Summerville, S. C.
James E. Gillis .....	Agt. Tick Eradication	Kingstree, S. C.
J. C. Hoats .....	Agt. Tick Eradication	Walterboro, S. C.
W. H. Jones .....	Agt. Tick Eradication	Andrews, S. C.
J. M. Boyd .....	Agt. Tick Eradication	Conway, S. C.
H. L. Easterlin .....	Agt. Tick Eradication	Adams Run, S. C.
J. C. Kinsey .....	Agt. Tick Eradication	Awensdaw, S. C.
V. E. McCormack .....	Agt. Tick Eradication	Ridgeland, S. C.
E. E. Wyndham .....	Agt. Tick Eradication	Bonneau, S. C.
L. S. Baer .....	Assistant Veterinarian	Columbia, S. C.
P. J. Gallagher .....	Assistant Veterinarian	Columbia, S. C.
J. R. Urich .....	Assistant Veterinarian	Columbia, S. C.
Mrs. O. M. Owen .....	Clerk-Stenographer .....	Columbia, S. C.
George Smith .....	Clerk .....	Columbia, S. C.
E. E. Lent .....	Assistant Veterinarian	Columbia, S. C.
J. H. Rietz .....	Asst. State Veterina'n	Columbia, S. C.
M. L. Boyd .....	Asst. State Veterina'n	Walterboro, S. C.
E. T. Fisher .....	Asst. State Veterina'n	Columbia, S. C.
H. B. Hood .....	Asst. State Veterina'n	Kingstree, S. C.
W. D. McCormack.....	Asst. State Veterina'n	Conway, S. C.
R. A. Mays .....	Asst. State Veterina'n	Columbia, S. C.
F. K. Peterson .....	Asst. State Veterina'n	Columbia, S. C.
S. D. Shoulkin .....	Asst. State Veterina'n	Allendale, S. C.
R. K. Donly .....	Clerk .....	Columbia, S. C.
W. H. Antley .....	Asst. to Veterinar'ns	Strawberry, S. C.
A. M. Addison .....	Asst. to Veterinar'ns	Walterboro, S. C.
C. L. Anderson .....	Asst. to Veterinar'ns	McClellanville, S. C.
B. C. Baker .....	Asst. to Veterinar'ns	Cades, S. C.
W. E. Baker .....	Asst. to Veterinar'ns	Kingstree, S. C.
A. B. Bishop .....	Asst. to Veterinar'ns	Jamestown, S. C.
William Bivens .....	Asst. to Veterinar'ns	Ravenel, S. C.
T. W. Bivens .....	Asst. to Veterinar'ns	Ravenel, S. C.
J. L. Brockington .....	Asst. to Veterinar'ns	Wando, S. C.
W. J. Carson .....	Asst. to Veterinar'ns	Moncks Corner, S. C.
B. S. Chandler .....	Asst. to Veterinar'ns	Wando, S. C.
M. V. Cox .....	Asst. to Veterinar'ns	Hemmingway, S. C.
C. M. Dempsey .....	Asst. to Veterinar'ns	Early Branch, S. C.
Allen Fort .....	Asst. to Veterinar'ns	Wando, S. C.
H. C. Gore .....	Asst. to Veterinar'ns	Longs, S. C.
E. W. Goodwin .....	Asst. to Veterinar'ns	Ritter, S. C.
T. A. Querry .....	Asst. to Veterinar'ns	Bonneau, S. C.
G. W. Hill .....	Asst. to Veterinar'ns	Ridgeville, S. C.
R. B. Hills .....	Asst. to Veterinar'ns	Edisto Island, S. C.
J. J. Jackson .....	Asst. to Veterinar'ns	Awensdaw, S. C.
J. D. Limehouse .....	Asst. to Veterinar'ns	Summerville, S. C.



A. G. Mitchum .....	Asst. to Veterinar'ns	Bethera, S. C.
G. W. Munn .....	Asst. to Veterinar'ns	Awensdaw, S. C.
J. Y. Murray .....	Asst. to Veterinar'ns	Moncks Corner, S. C.
W. J. Phillips .....	Asst. to Veterinar'ns	Alvin, S. C.
J. M. Rowell .....	Asst. to Veterinar'ns	Bluffton, S. C.
J. W. Raybourne.....	Asst. to Veterinar'ns	McClellanville, S. C.
E. G. Thomas .....	Asst. to Veterinar'ns	McClellanville, S. C.
W. J. Thomas .....	Asst. to Veterinar'ns	Bethera, S. C.
J. W. Stewart .....	Asst. to Veterinar'ns	Kingstree, S. C.
C. W. Stuckey .....	Asst. to Veterinar'ns	Nesmith, S. C.
D. W. Varner .....	Asst. to Veterinar'ns	Ridgeville, S. C.
R. L. Weatherford .....	Asst. to Veterinar'ns	Moncks Corner, S. C.
H. A. Wheeler .....	Asst. to Veterinar'ns	Trio, S. C.
F. H. Worthington .....	Asst. to Veterinar'ns	Frogmore, S. C.
F. E. Wyndham .....	Asst. to Veterinar'ns	Bonneau, S. C.
J. M. Bunch .....	Cattle Inspector .....	Honey Hill, S. C.
Adam Muckenfuss .....	Cattle Inspector .....	Ridgeville, S. C.
J. C. Hood .....	Cattle Inspector .....	Bonneau, S. C.
J. D. Smith .....	Cattle Inspector .....	Georgetown, S. C.
B. H. Vereen .....	Cattle Inspector .....	Burgess, S. C.
J. W. Wilson .....	Cattle Inspector .....	Honey Hill, S. C.
L. M. Alsbrooks .....	Cattle Inspector .....	Wilson, S. C.
D. E. Hay .....	Cattle Inspector .....	Johns Island, S. C.
R. C. Carston .....	Cattle Inspector .....	Cades, S. C.
V. D. Johnson .....	Cattle Inspector .....	Conway, S. C.
C. L. Crawley .....	Cattle Inspector .....	Hilton Head, S. C.
*J. M. Leaphart .....	Clerk .....	Columbia, S. C.
*J. E. Wilson .....	Clerk .....	Columbia, S. C.

\*J. E. Wilson and J. M. Leaphart, clerks, are paid out of Hog Cholera Control Reinvestment Fund.

Respectfully submitted,

W. K. LEWIS,

Inspector in Charge and State Veterinarian.



## REPORT OF THE AUDITOR

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Hon. W. W. Bradley,  
State Bank Examiner,  
Columbia, South Carolina.

Sir:

Pursuant to instructions, I have audited the books, vouchers and accounts of Clemson Agricultural College, Clemson College, South Carolina, covering the period commencing July 1, 1924 and ended June 30, 1925. I have included in this examination, also, an audit of the general cash accounts to the close of business August 31, 1925.

Dated at Columbia, South Carolina, this 20th day of September, A. D. 1925. Report herewith.

Respectfully submitted,

LOUIS A. SEARSON,  
Certified Public Accountant.

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### GENERAL REPORT

Office of College Treasurer  
(Mr. Samuel W. Evans)

#### General Comments.

In addition to the usual work of this department, which we have carefully reviewed, according to the general custom, there are several matters of extraordinary interest which we especially desire to call to your attention. Regarding such matters, it seems appropriate to state that the Treasurer has a clear and detailed record for further information.

(1) The college funds have been largely distributed with the banks throughout the state, and there is every reason to believe that the policy has been to select such depositories as are generally regarded as being among the strongest banking institutions in the various sections. The Treasurer has secured a good income for the college on account of interest paid by these banks on average deposits. One of these depositories (the Farmers and Merchants Bank of Anderson) unfortunately, closed its doors in the year 1922, with a balance of \$17,500.00 to the credit of Clemson College. The records show, however, that dividends aggregating \$7,905.20 or something over 45 percent, have been since paid by the Agents in Liquidation, and the present balance in the insolvent Farmers and Merchants Bank is \$9,594.80.

As stated by the writer, in an audit report of the year ended June 30, 1924, the Treasurer has been successful in his efforts to secure all



funds on deposit, either by surety bonds or by high grade collateral, which the depositories are required to furnish. Failure of the Bank of Pendleton, in June, 1925, has caused a temporary "tie-up" of \$26,051.18—which might be explained as follows: the balance on deposit, as shown by a statement from the books of the bank, amounting to \$15,741.69, and also checks aggregating \$10,309.49, which the bank had charged to the college account. Clearance of the checks in question was not completed, owing to the fact that the bank's remittance check went to protest. The Treasurer, therefore, in order to protect the credit and good name of the College, (acting upon authorization of the Chairman of the Finance Committee, as shown by the minutes of a Trustees meeting) has issued new checks to satisfy the creditors affected. The account with the Bank of Pendleton being covered by a Surety Bond, in the sum of \$30,000.00, it appears that there should be no loss from this source. I note from correspondence examined, that the Treasurer, through his Attorneys, has entered a claim for the proper sum of \$26,051.18, which unquestionably constitutes the liability of the Bonding Agency, under its contract.

(2) Work in the office has been greatly facilitated by recent adoption of the State Budget, as outlined by the South Carolina Budget Commission. As the College Classification did not formerly conform to the State Budget, the Treasurer was called upon to do considerable extra work in preparing his reports to the Budget Commission. The change in this respect should be beneficial and the funds will be amply protected.

(3) During the past year, the new uniform voucher system has been effective. It is gratifying to note that the Treasurer's ideas, in this connection, have been correct in principle, and that the accounting methods, under present conditions, are ideal for a department of this kind.

The apparent cooperation between the Treasurer's office and other departments of the college is notable and the records examined reflect the activities of this officer, and of his staff, in a most creditable degree.

#### **Books and Records.**

The books of account have been audited in detail and the work of the bookkeepers is remarkably accurate. I have no errors to report, and no unfavorable comments are called for regarding the methods in general. All disbursements are covered by itemized vouchers, to which the checks are attached, as provided by the new uniform voucher system. In every case, I find that the claims are properly approved by the President and by department heads and division heads. Purchases of supplies, materials, etc., are made on requisition only and all orders are issued directly through this department.

I have also checked the various items of income, which are shown in detail through an "Income Voucher System." The Treasurer issues a receipt in duplicate, for each item of revenue, retaining the original as a permanent office record, and giving the duplicate to the party from whom any money is received.



The individual accounts with students, (showing all transactions from the date of matriculation,) now number about 1200 and the student deposits about 600, making approximately 1800 individual accounts with students of the college.

#### College Fund.

On page 4 of this report, I present a general statement of receipts and disbursements. This statement refers to funds available for direct use of the college. Supporting this statement, is a schedule giving the classification of expenditures according to the Treasurer's standard distribution of accounts. I have also, compiled the figures from a different angle, as set forth in the revised classification, presented on page.....

The general college account includes certain expenditures for Public Work, as well as for actual College Work.

#### Sources of Revenue

The sources of revenue supporting Clemson College may be divided into nine general classes, as follows: Privilege Fertilizer Tax, Morrill and Nelson Funds, Interest on Landscip, Interest on Clemson Bequest, Tuition, Rentals, Students Fees, Miscellaneous Income and State Appropriations. About 57% of the income for the year ending June 30, 1925, was derived from the fertilizer tax and something over 22% (or \$84,137.15) was appropriated by the State for College Instruction; the remaining 21% being receipts from the other sources named above. The following statement is therefore appropriate:

#### STATEMENT

57% Income from Fertilizer Tax (main sources).....	\$217,100.00
21% Income from Other Sources .....	75,845.91
	\$292,945.91
22% Appropriation for College Instruction.....	84,137.15
.....	
100% Total Year ended June 30, 1925 .....	\$377,083.06
Balance July 1, 1924 .....	\$124,079.55
Total available .....	\$501,162.61

This section, of course, refers only to the general college fund. Other funds such as the Cadet Fund, Revolving Fund, etc., are discussed elsewhere.

#### Other Funds.

The statement on pages ..... describes, in classified form, the Cadet Fund; representing the receipts and the maintenance expenses on account of money collected from the students for the purposes specifically stated. I believe that this statement is self explanatory, so further comment is unnecessary.

I also present a classified statement of the Revolving Accounts, which statement is likewise self-explanatory.



**STATEMENT OF RECEIPTS AND DISBURSEMENTS**

(General College Account, Year ended June 30, 1925)

**RECEIPTS****Income; (from General Sources)**

Balance on hand July 1, 1924.....		\$124,079.55
Privilege Fertilizer Tax .....	\$217,100.00	
Morrill and Nelson Fund.....	25,000.00	
Interest on landscrip .....	5,754.00	
Interest on Clemson Bequest.....	3,512.36	
Tuition from Students.....	14,625.00	
Rents .....	13,606.17	
Matriculation and Laboratory Fees.....	5,432.82	
Interest and Misc. Receipts.....	7,915.56	\$292,945.91

**From Other Sources—****Part Appropriations for College Instruction—**

July 1 to Dec. 31, 1924 .....	\$ 30,790.75	
January 1 to June 30, 1925.....	53,346.40	\$ 84,137.15

Total .....		\$501,162.61
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**EXPENDITURES****For Public State Work;**

Scholarships and Advertisements .....	\$ 14,873.35	
Fertilizer Inspection and Analysis .....	30,616.96	\$ 45,490.31

**College Operating Expenses:**

Salaries .....	\$181,254.16	
Coal, Labor, Supplies, etc. ....	108,527.24	\$289,781.40

**Equipment and Additions:**

Equipment for Teaching .....	\$ 24,397.82	
Permanent Additions and Improvements.....	30,680.96	\$ 55,078.78

Total .....		\$390,350.49
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Reserve on hand June 30, 1925 necessary  
to carry College during Season of small Fer-  
tilizer sales,

July 1st to January 1st .....		\$110,812.12
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Total .....		\$501,162.61
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## SUPPLEMENTARY REPORTS

## STATEMENT OF EXPENDITURES

(Distribution of expenses, etc., according to college classification  
Year ended June 30, 1925)

## PUBLIC STATE WORK

Scholarships and Advertisements .....	\$ 14,873.35	\$ 14,873.35
Fertilizer Inspection and Analysis—		
Salaries—Chemists .....	8,781.45	
Chemicals .....	465.17	
Apparatus .....	300.00	
Gasoline .....	295.44	
Record books, postage, etc .....	196.39	
Incidentals .....	7.47	
Labor—Janitor .....	300.00	
Extra help in Lab'y and Office .....	479.99	
Emergency Supplies, Labor, etc. ....	475.95	
Traveling expenses .....	64.39	
Telephone and Telegraph .....	17.85	
Salaries Sect'y and Clerk .....	3,999.96	
Labor-Janitor (Fertilizer Inspection) ..	600.00	
Inspection Tags and Printing .....	5,111.13	
Pay and Travel of Inspectors .....	8,024.36	
Freight, Postage, etc .....	583.77	
Legal Services .....	250.00	
Fertilizer Bulletins .....	663.64	\$ 30,616.96
Public State Work Expenditures .....		\$ 45,490.31

## COLLEGE WORK

## Academic Department

## Economics and Sociology Division—

Periodicals and reference books .....	\$ 3.75	\$ 3.75
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## English Division—

Stationary, etc. ....	8.50	
Shelves, Stands, etc. ....	39.50	48.00

## History Division—

Periodicals for class room .....	8.00	8.00
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## Office and Unclassified Division—

Janitor (upper floor) .....	423.16	
Chalk, Erasers, brooms, Stat'y, etc. ....	126.10	
Telephone .....	36.00	585.26



**Physics Division—**

Laboratory supplies and repairs .....	144.97	
Additional seating .....	321.81	
Physics apparatus .....	349.95	
Shades and lights .....	58.81	
Tables .....	98.59	974.13

**Salaries—**

Salaries—Professors and Assistants .....	36,742.94	36,742.94
Department expenditures.....		\$ 38,362.08

**AGRICULTURAL DEPARTMENT****Agricultural Education Division—**

Transportation of Students .....	\$ 284.88	
Printing School leaflets .....	191.85	
Freight and Express .....	2.04	
Supplies .....	99.00	
Communication .....	125.13	
Lantern slides .....	41.67	
Office Equipment .....	147.14	
Laboratory Equipment .....	90.20	
Binding Magazines .....	46.75	
Typewriter and Linotype .....	71.03	\$ 1,099.69

**Agronomy Division—**

Labor .....	300.00	
Seeds, score cards, etc. ....	49.98	
Repairs and parts for machine .....	49.99	
Material for class work .....	199.55	
Cement, gasoline, oil, etc.....	150.00	
Small Laboratory Equipment .....	500.00	
Office Equipment .....	50.00	
Equipment, Farm Mach Lab'y .....	850.00	2,149.52

**Animal Husbandry Division—**

Labor .....	1,006.14	
Expenses, Judging contests.....	27.42	
Veterinary service and feed .....	3,850.00	
Miscellaneous supplies .....	99.43	
Registration books .....	47.75	
Farm tools .....	199.74	
Water pipe for lots .....	498.74	



## SUPPLEMENTARY REPORTS

Fencing .....	496.12	
Pasture improvements .....	848.09	
Beef Cattle .....	992.20	
Hog houses, sheds, and gates .....	899.41	
Sheep .....	500.00	
Berkshire boar .....	200.00	
Drain for hog barn .....	50.00	
Poultry husbandry equipment .....	78.16	9,793.20

**Botany and Bacteriology Division—**

Botanical publications .....	37.83	
Glassware and Lab'y supplies .....	400.79	
Repairs and Replacements .....	96.74	
Seats .....	98.40	
Microscopes projection apparatus .....	213.15	
Morphology Equipment .....	99.03	
Physiological Equipment .....	124.68	
Oil immersion objections .....	209.92	
Forestry work on Campus .....	181.25	1,461.79

**College Farm Division—**

Ditching in bottoms .....	600.00	
Repairs .....	200.00	800.00

**Dairy Division**

Freight and Repairs .....	59.57	
Foreman—Creamery .....	900.00	
Foreman—Dairy Herd (1-3 salary) .....	555.49	
Labor—Dairy Herd for teaching .....	500.85	
Feed and Vet. supplies—Teaching .....	693.55	
Educ. supplies, glassware and chemicals .....	301.46	
Operating expenses and upkeep .....	128.26	
Repairs, Creamery, etc. ....	193.08	
Expenses of Inst. to judging contests .....	133.59	
Expenses Dairy cattle, State Fair .....	300.00	
Barn equipment .....	97.42	
Creamery equipment (Teaching) .....	352.45	
Equipment Senior Laboratory .....	299.01	
Equipment, 10 Stalls .....	594.00	
Improvement to grounds .....	48.25	
New fencing .....	505.15	
Pasture Improvements .....	493.53	
Jersey Cattle .....	398.27	
Roof for Silos (C. & R.) .....	642.60	
Medicine chest .....	25.00	
Ten box stalls .....	1,753.29	
Labor, C. B. Henry .....	75.00	9,049.82



**Entomology Division—**

Class and Laboratory materials .....	267.83	
Labor .....	180.00	
Repairs to instruments .....	49.46	
Spray and dusting equipment .....	332.29	
Microscopes .....	249.57	
Office and Lab'y equipment .....	179.79	1,258.94

**Geology and Mineralogy Division—**

Chemical and Lab'y supplies and repairs.....	49.74	
Labor .....	40.30	
Lantern slides .....	25.00	
Maps and Charts .....	36.75	151.79

**Horticultural Division—**

Part salary Greenhouse Foreman .....	660.00	
Part salary Hort. Foreman .....	660.00	
Labor .....	899.96	
Seeds, plants, fertilizer, etc. ....	449.29	
Greenhouse supplies and repairs .....	199.58	
Coal for Greenhouse .....	100.00	
Spray apparatus and material .....	96.88	
Feed and shoeing two mules .....	149.95	
Oil, gas, etc. ....	100.00	
Tools for class use .....	49.12	
Spray apparatus .....	31.85	
Office equipment .....	30.00	
Class room Equipment .....	161.56	3,588.19

**Office and Unclassified Division—**

Janitors and Janitor's supplies .....	1,264.88	
Gasoline .....	93.46	
Attendance on Conventions .....	144.57	
Stationery, postage, etc. for Dept. ....	575.04	
Upkeep of Building .....	148.37	
Telephones .....	253.85	
Filing Cases .....	23.58	2,503.75

**Veterinary Science Division—**

Janitor and Extra Labor .....	520.08	
Veterinary Journals .....	4.00	
Laboratory supplies for class .....	82.36	606.44

**Salaries—**

Salaries Professors and Assistants .....	40,280.77	40,280.77
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Department Expenditures .....		\$ 72,743.90
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## SUPPLEMENTARY REPORTS

## CHEMISTRY DEPARTMENT

## Chemistry Division—

Chemical Apparatus .....	\$	600.00	
Chemical Supplies .....		700.00	
Gasoline .....		276.87	
Books, Journals and Binding .....		181.65	
Repairs to Apparatus .....		52.32	
Incidentals .....		131.71	
Labor, Janitors and Office Help .....		660.00	
Repairs to Plumbing .....		397.19	
Telephone .....		25.90	
Chemical Apparatus .....		589.94	
Student Apparatus Lockers .....		150.00	
Fitting up class room .....		315.48	
Partitions and shelving .....		55.13	
Kyepdhal Durion Apparatus .....		557.21	4,692.40

## Salaries—

Salaries Professors and Assistants.....	9,999.88	9,999.88
Department Expenditures .....		\$ 14,692.28

## ENGINEERING DEPARTMENT

## Civil Engineering Division

Class materials .....	\$	196.49	
Repairs and Replacements .....		249.93	
Building Lockers and Tables .....		87.20	
Material and labor for con'st equipment.....		100.00	
Miscellaneous laboratory equipment .....		100.00	
Electric Ovens .....		254.53	
Compression Blocks .....		80.00	
Desk and Chair .....		73.15	
Scales and Small apparatus .....		50.00	\$ 1,191.30

## Drawing Division—

Materials, ink, paper, etc. ....	19.88	
Repairs and Renewals of Apparatus .....	68.77	
Expenses Architectural Contest .....	25.22	
Subscriptions to Architectural Magazines.....	53.50	
Student Help .....	48.04	
Drafting Stool and Table .....	125.00	
Locks and Lockers .....	40.00	
Architectural Reference Books .....	107.74	
Plaster Casts .....	25.00	513.15



**Electrical Engineering—**

Laboratory Supplies .....	190.90	
Repairs and Renewals .....	150.00	
Class and laboratory notes for students.....	29.75	
Student Assistance .....	139.65	
Periodicals and Reference Books .....	38.04	
Telephone .....	39.90	
Watermeter and Transformers .....	542.00	
Motor .....	322.00	
Switchboard .....	157.00	
Shelves and tables .....	95.86	
Ammeters, voltmeters .....	185.00	
Rheostats, potentiometer, condenser .....	250.00	
Resistance boxes .....	75.00	
Freight on machinery .....	79.67	2,213.77

**Forge and Foundry Division—**

Labor .....	1,695.00	
Repairs and Replacements.....	74.69	
Forge shop supplies, iron, steel, etc.....	296.58	
Coal for Forge Shop .....	375.00	
Foundry supplies, as plumbago, etc.....	49.72	
Moulding sand .....	57.00	
Coke for Foundry .....	65.00	
Anvils .....	120.00	
Pig iron and brass for foundry .....	150.00	2,882.99

**Machine Shop Division—**

Labor—Machinist .....	1,000.01	
Repairs and Replacements .....	201.12	
Shop materials .....	399.68	
Frt. on Milling Mach. (Highway Dept.) .....	51.45	
Com. Milling attachment .....	233.32	
Spiral Milling attachment .....	289.60	
Opening Disc .....	88.58	2,263.76

**Mechanical Engineering—**

Laboratory Supplies .....	120.58	
Repairs and Replacements .....	47.00	
Pyrometer .....	200.00	
Desk .....	30.00	
Stools .....	100.00	
Weirs .....	75.00	
Semi Diesel Engine .....	600.00	
Small Laboratory apparatus .....	387.98	
Dynamometer .....	400.00	
Voltmeter .....	46.09	2,006.65



## SUPPLEMENTARY REPORTS

**Office and Unclassified Division—**

Labor, Janitoring building .....	575.00	
Office and Janitors Supplies .....	209.85	
Upkeep of Building .....	45.97	
Attendance on Conventions .....	80.77	
Incidentals .....	2.77	
Telephone .....	36.00	950.36

**Wood Shop Division—**

Labor—Machinist .....	449.75	
Supplies as lumber, hdw. paint, etc. ....	520.81	
Repairs and Replacements of tools and Mach	295.03	1,265.59

**Salaries—**

Salaries, Professors and Assistants.....	37,274.50	37,274.50
Department Expenditures .....		<u>\$ 50,562.07</u>

**MILITARY DEPARTMENT****Office and Unclassified—**

Postage, Stationery, Record books .....	\$ 486.53	
Military Supplies .....	166.73	
Upkeep of band .....	100.00	
Officers Sabers .....	198.40	
Losses of Federal Property .....	71.44	
Cadet Officers Insignia .....	317.25	
Telephone .....	48.40	
Band Instruments .....	142.11	
Target Range .....	99.96	
Class room Equipment .....	55.90	
Office Equipment .....	100.00	\$ 1,786.72

**Salaries—**

Salaries—Commandant and Assistants.....		5,022.49
Department Expenditures .....		<u>\$ 6,809.21</u>

**TEXTILE DEPARTMENT****Carding and Spinning Division—**

Cotton for Class use .....	\$ 471.89	
Repairs and Supplies .....	218.96	
Materials for cotton grading .....	100.00	
Twist Counters .....	75.00	
Two Spinning Frames .....	448.65	\$ 1,314.50



**Dyeing Division—**

Chemicals and Dye Stuff .....	237.64	
Class room and Laboratory materials .....	247.75	
Misc. Small Lab'y apparatus .....	139.71	625.10

**Office and Unclassified Division—**

Janitor and Engineer .....	1,132.10	
Gasoline .....	75.04	
Stationery, Postage, etc. ....	95.04	
Student Labor .....	84.40	
Mill boy Helper .....	394.90	
Textile periodicals .....	11.98	
Freight on donated machinery .....	250.26	
Telephone .....	35.75	
Typewriter .....	50.00	
Pulleys, bolts and installation .....	189.13	2,318.60

**Weaving and Designing Division—**

Warp and Filling Yarn .....	698.67	
Loom Supplies and Repairs .....	234.53	
Yarns for new fancy looms .....	354.72	
Hand Knitting Machines .....	155.41	1,443.33

**Salaries—**

Salaries Professors and Assistants .....	13,726.44	13,726.44
Department Expenditures .....		\$ 19,427.97

**PUBLIC UTILITIES DEPARTMENT****Campus Division—**

Part Salary Campus Foreman .....	\$ 660.00	
Labor for Campus .....	1,999.11	
Fertilizers .....	500.00	
Seeds, plants, and trees.....	650.00	
Feed and upkeep of mules .....	549.23	
Tools, machinery and repairs .....	179.50	
Cement walks .....	413.94	
Storm weather drainage .....	488.14	
Development Exp. Station Road .....	299.95	
Development Chapel area, Bar. I, Y, etc.....	1,399.66	
Development other Lawns .....	500.00	
Mower and hand mowers .....	174.92	
Developing Cemetery .....	731.81	\$ 8,546.26



**Construction and Repairs Division—**

Office supplies, postage, files, etc. ....	50.83	
Repairs and Renewals of Apparatus .....	25.00	
Tools and Implements .....	50.00	
Gasoline and Tires for Truck .....	383.44	
Misc. unforeseen repairs to Public Bldg.....	1,416.00	
Stack of lumber .....	535.70	
Telephone .....	66.00	
Repairs to Public Buildings (Ex "A") .....	8,025.77	
Repairs to Residences (Ex "B") .....	6,227.52	
Moving servant house .....	318.45	
Steel beams in place of wood in Mess Hall .....	688.92	
Roof over rear porch (Hospital) .....	179.93	
Two toilets in C. & R. Division .....	181.61	
Dry room (C. & R. Div.) .....	105.43	
Completion C. & R. Shop .....	299.23	
Moving Garage .....	24.20	
Screen windows (Vet. Hospital) .....	23.72	
Room 3rd. floor, Eng. Bldg .....	299.69	
Partition, Mach. Lab'y .....	125.49	
Completing room, Elec. Lab'y .....	299.90	
Radiators in office Agr. Hall .....	40.42	
Drain from Barn .....	170.80	
Heating and lighting Chapel and Phys. room .....	1,500.00	
Seating in Chapel .....	8,554.91	
Completing Chapel .....	8,507.24	
Curtain and Scenery for Chapel .....	1,039.69	
Memorial tablet Dr. Riggs .....	302.50	
Memorial tablet Prof. Sease .....	75.00	
Memorial tablet Dr. Redfern .....	75.00	
Cement steps and walks, Bar. I .....	1,128.00	
Vestibule, front and rear, (Hospital) .....	38.40	
Bal. from Bks. I toilet on No. II .....	867.34	
Ceiling servant house, Long .....	45.30	
Ceiling servant house, Bradley .....	109.00	
Doors and windows. (Holmes) .....	74.29	
Latticing, (Horton) .....	43.77	
Closets (Mell House) .....	74.23	
Pair doors (Earle) .....	77.23	
Latticing under house (Earle) .....	29.07	
Close up under house (Goodman) .....	75.77	
Two doors (Littlejohn) .....	41.08	
Partition rear porch (Littlejohn) .....	40.91	
Salary Supt. (Hewer) .....	1,800.00	44,036.78



**Heat, Light and Water Division—**

Labor .....	6,900.10	
Supplies .....	1,899.45	
Coal .....	14,091.46	
Repairs .....	739.19	
Telephone .....	42.00	
Developing grounds, Pumping Station .....	451.11	
Fire hose .....	300.00	
Steam pump .....	250.00	
Plumbing for residences .....	141.47	24,814.78

**Radio System Division—**

Radio Operator and Supplies .....	500.00	500.00
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**Roads, Sidewalks and Hauling Division—**

Labor, truck drivers, etc. ....	2,362.05	
Hire of teams from farm .....	200.00	
Gasoline, oil, tires, etc. ....	1,255.06	
Top soiling roads .....	570.25	
Salary Supt. (Lewis) .....	1,500.00	5,887.36

**Watchman Division—**

Salary of night-watchman and police .....	910.00	
Watchman supplies .....	37.01	
Special police service (if needed) .....	142.00	1,089.01
Department Expenditures .....		\$ 84,874.19

**MISCELLANEOUS DEPARTMENT****Library Division—**

Salaries .....	\$ 3,875.00	
Magazines .....	249.85	
Binding Magazines and Periodicals .....	199.79	
Supplies as cards, stationery, etc. ....	100.00	
Membership dues to societies .....	60.00	
Telephone .....	36.00	
Books .....	499.10	
Supplies (Reference Library) .....	100.00	
Binding (Reference Library) .....	196.70	
Periodicals (Reference Library) .....	149.48	
Books (Reference) .....	407.90	
Library Equipment (Reference Library) ....	730.33	\$ 6,604.15



**Miscellaneous Items Division—**

Expenses of Trustees and Bd. of Visitors ...	1,119.07	
Insurance .....	5,335.51	
Contingent and incidental expenses .....	2,453.22	
Ministers .....	1,694.40	
Y. M. C. A. Secretary .....	500.00	
College Catalogue .....	800.00	
Annual report to Legislators .....	42.00	
Commencement Expenses .....	301.37	
Trustee medals .....	30.30	
Membership of College in Nat. Assoc. ....	124.00	
Examination booklets .....	241.80	
Pension of J. B. S. ....	300.00	
Scavenger services .....	495.00	
Gasoline and repairs, College Ford .....	199.84	
State Fair Exhibits (College Work) .....	375.66	
Travel and Entertainment Leg. Committee	631.88	
Popular Bulletins .....	79.91	
Summer School .....	5,052.00	
Tablet L. I. McHugh .....	25.00	
Salary—Magistrate .....	99.96	
Concrete Mixer .....	500.00	
Improvements to Riggs Res. and Premises	618.00	21,018.92

**Presidents Office Division—**

Student cards, forms, etc. ....	681.34	
Stamps, stationery, supplies, etc. ....	988.09	
Traveling Fund .....	617.45	
Janitor and Janitors supplies for Col. Bld	605.32	
Telephone rental, three phones .....	108.00	
Telegrams and long distance calls .....	200.60	
Salaries .....	16,904.76	20,105.56

**Treasurer's Office Division—**

Record forms, supplies, etc. ....	1,375.00	
Clerical assistance .....	840.00	
Bond of Treasurer and two assistants .....	125.00	
Telephone .....	35.35	
Salaries .....	6,595.52	
Audit of books .....	688.98	9,659.85

Department Expenditures .....		<u>\$ 57,388.48</u>
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(For recapitulation of expenditures by departments)



**RECAPITULATION**

(Statement of expenditures according to college classification  
For year ended June 30, 1925)

Public State Work .....	\$ 45,490.31	
Academic Department .....	38,362.08	
Agricultural Department .....	72,743.90	
Chemical Department .....	14,692.28	
Engineering Department .....	50,562.07	
Military Department .....	6,809.21	
Textile Department .....	19,427.97	
Public Utilities .....	84,874.19	
Miscellaneous Department .....	57,388.48	<u>\$390,350.49</u>

**ANALYSIS OF EXPENDITURES**

(Revised classification)

Fiscal year ended June 30, 1925

**COLLEGE WORK****(A) For Personal Service:**

Executive and clerical salaries \$	24,340.28	
Professors and instructors ....	138,024.53	
Miscellaneous salaries and labor	35,747.83	
Ministers .....	1,694.40	\$199,807.04

**(B) For Other Current Expenses:**

Sundry supplies .....	11,257.09	
Veterinary service and feed .....	4,549.18	
Insurance .....	5,335.51	
Printing, postage and stationary	8,098.66	
Travel, expenses and entertain- ment of trustees, etc., .....	3,740.51	
Telephone and telegraph .....	962.75	
Freight and express .....	443.17	
Gas, oil and motor expense.....	2,316.76	
Not otherwise classified.....	7,174.73	
Fuel .....	14,631.46	
Summer school .....	5,052.00	
Memorial tablets .....	477.50	64,039.32

**(C) Equipment and Apparatus:**

Equipment and apparatus ....	17,825.74	
Band and military equipment	729.20	
Radio .....	500.00	19,054.94

**(D) Repairs, Replacements and Improvements:**

Miscellaneous .....	12,462.85	
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## SUPPLEMENTARY REPORTS

Public buildings;			
Sundry .....	8,025.77		
Chapel .....	19,601.84	27,627.61	
Residences .....		12,389.17	
Grounds .....		7,388.78	59,868.41
(E) Livestock .....		2,090.47	2,090.47
Total Expenditures College Work			\$344,860.18

## PUBLIC STATE WORK

## (A) Personal Service:

Chemists salaries .....	8,781.45		
Laboratory and office help ....	479.99		
Secretary and clerk .....	3,999.96		
Inspectors (Pay and travel) ....	8,024.36		
Janitor .....	900.00		
Legal services .....	250.00	22,435.76	

## (B) Other Expenses:

Records, books, postage etc. ....	780.16		
Fertilizer bulletins .....	663.64		
Inspection tags and printing	5,111.13		
Telephone and telegraph .....	17.85		
Sundry traveling expense .....	64.39		
Gasoline and oil .....	295.44		
Chemical supplies, etc. ....	948.59	7,881.20	

## (C) Apparatus

300.00

## (D) Scholarships and advertisements

14,873.35 45,490.31

## Total College and Public State Work

\$390,350.49

STATEMENT OF CADET FUND ACCOUNT  
(Year ended June 30, 1925)

## Miscellaneous Division

## Income—

Balance on hand July 1st. 1924 ..... \$ 18,432.80

## Expenditures—

Materials, etc .....	\$ 132.87	
Labor—Carpentering, etc. ....	261.14	
Supplies .....	766.34	
Equipment .....	6,993.80	
Legal services .....	35.00	8,189.15

Balance June 30, 1925 ..... 10,243.65  
\$ 18,432.80



**Breakage****Income—**

Cash received from students .....		\$ 3,393.61
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**Expenditures— .....**

Labor .....	1,086.71	
Materials .....	617.49	
Freight .....	5.89	
Hymnals .....	100.00	
Supplies .....	685.34	
Household Equipment .....	844.18	
Refunds to students .....	54.00	3,393.61

**Heat, Light and Water****Income—**

Cash received from students .....		\$ 16,367.90
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**Expenditures—**

Labor .....	3,513.90	
Materials .....	565.29	
Coal .....	10,775.04	
Supplies .....	790.09	
Repairs .....	260.97	
Refunds to students .....	427.74	16,333.03

Balance—June 30, 1925 .....		34.87
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		\$ 16,367.90
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**Hospital****Income—**

Cash received from students .....		9,878.92
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**Expenditures—**

Salaries .....	3,666.66	
Labor .....	2,837.97	
Telephone and Telegrams .....	66.25	
Freight and Express .....	8.51	
Food Supplies .....	1,099.31	
Laundry, etc. ....	351.66	
Coal .....	369.51	



## SUPPLEMENTARY REPORTS

Refrigerating supplies .....	139.10	
Medical and Surgical supplies .....	375.83	
Refunds to students .....	79.17	
Miscellaneous Supplies .....	233.82	
Membership dues .....	10.00	
Household Equipment .....	227.77	
Traveling Expenses .....	100.00	9,565.56

Balance—June 30, 1925 .....		313.36
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		<u>\$ 9,878.92</u>
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**Incidentals****Income—**

Cash received from students .....		8,905.84
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**Expenditures—**

Salary—Quartermaster .....	687.50	
Labor .....	3,231.60	
Freight and Express .....	62.34	
Cleaning and Disinfectant .....	331.72	
Miscellaneous Supplies .....	1,492.65	
Telephone service .....	36.00	
Office Supplies .....	14.00	
Refunds to students .....	65.50	
Household Equipment, chairs, etc. ....	3,936.24	9,857.55
Balance June 30, 1925 (Over-draft) .....		951.71

		<u>\$ 8,905.84</u>
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**Laundry****Income—**

Cash received from students .....		14,702.17
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**Expenditures—**

Salaries .....	249.96	
Labor .....	9,238.78	
Freight and Express, Tel. and Teleg. ....	120.07	
Miscellaneous printed forms .....	150.25	
Coal .....	499.50	
Laundry Supplies .....	2,052.16	
Clothing and Drygoods .....	45.35	



Miscellaneous Supplies .....	92.89	
Equipment .....	663.62	
Refunds to students .....	262.41	13,374.99
		<hr/>
Balance—June 30, 1925 .....		1,327.18
		<hr/>
		14,702.17
		<hr/> <hr/>

**Subsistence  
Income—**

Cash received from students ..... 161,503.88

**Expenditures—**

Salaries .....	3,749.92	
Labor .....	20,735.78	
Groceries .....	132,956.62	
Coal .....	644.17	
Miscellaneous Supplies .....	2,798.16	
Refunds to students .....	2,155.14	
Equipment ..	3,213.59	166,253.38
Balance June 30, 1925 (Over-draft) .....		4,749.50
		<hr/>
		\$161,503.88
		<hr/> <hr/>

**Uniforms**

**Income—**

Cash received from Students..... 54,491.06

**Expenditures—**

Uniform Garments .....	54,135.26	
Refunds to Students .....	1,298.31	55,433.57
Baalnce June 30, 1925 (Over-draft) .....		942.51
		<hr/>
		54,491.06
		<hr/> <hr/>



## RECAPITULATION CADET FUND

Item	Receipts	Expenditures	Balance	Deficit
Subsistence .....	\$161,503.88	\$166,253.38	\$	\$ 4,749.50
Uniforms ... ..	\$ 54,491.06	\$ 55,433.57	\$	\$ 942.51
Laundry .....	\$ 14,702.17	\$ 13,374.99	\$ 1,327.18	
H. L. and W. ....	\$ 16,367.90	\$ 16,333.03	\$ 34.87	
Hospital .....	\$ 9,878.92	\$ 9,565.56	\$ 313.36	
Incidentals .....	\$ 8,905.84	\$ 9,857.55	\$	\$ 951.71
Breakage .....	\$ 3,393.61	\$ 3,393.61		
Totals	\$269,243.38	\$274,211.69	\$ 1,675.41	\$ 6,643.72
Old Balance (July 1, 1924) .....	\$ 18,432.80	\$ 8,189.15	\$ 10,243.65	\$
	\$287,676.18	\$282,400.84		
Net Balance (June 30, 1925) .....	\$	\$ 5,275.34	\$	\$ 5,275.34
	\$287,676.18	\$287,676.18	\$ 11,919.06	\$11,919.06

STATEMENT OF THE STUDENT BANKING ACCOUNT  
(Year ended June 30th., 1925)

## Deposits—

Balance July 1, 1924 .....	1,951.61
Deposits July 1, 1924 to June 30, 1925 ....	94,433.82
Total cash to account for .....	\$ 96,385.43

## Checks Paid—

Checks paid July 1, 1924 to June 30, 1925	95,716.92
Balance June 30, 1925 .....	668.51
Total as accounted for .....	\$ 96,385.43

STATEMENT OF REVOLVING ACCOUNTS  
(Year ended June 30, 1925)

## Coast Station

## Receipts—

Miscellaneous Sales .....	\$ 498.03
---------------------------	-----------

## Expenditures—

Over-draft Brought Fd. ....	\$ 571.75
Over-draft June 30, 1925 .....	73.72
	571.75
	571.75



**Pee Dee Station****Receipts—**

Miscellaneous Sales .....		1,649.36
---------------------------	--	----------

**Expenditures—**

Over-draft Brought Fd. ....	2,212.38	
Reimbursement for ck. ....	450.00	
Over-draft—June 30, 1925 .....		1,013.02
	<hr/>	<hr/>
	2,662.38	2,662.38

**Veterinary Hospital****Receipts—**

Miscellaneous sales .....		233.25
---------------------------	--	--------

**Expenditures—**

Labor—Janitoring .....	70.00	
Feed and Veterinary Supplies .....	149.20	
Balance June 30, 1925 .....	14.05	
	<hr/>	<hr/>
	233.25	233.25

**Hog Cholera Serum Work****Receipts—**

Balance brought forward .....		12,807.38
Miscellaneous Sales .....		19,319.92

**Expenditures—**

Salaries—Clerks .....	3,000.00	
Feed and Veterinary Supplies .....	16,916.76	
Balance June 30, 1925 .....	12,210.54	
	<hr/>	<hr/>
	32,127.30	32,127.30

**Nursery Inspection Tags****Receipts—**

Cash brought Fd. ....		357.85
Sale of Tags .....		1,355.91

**Expenditures—**

Freight and Express .....	15.85	
Supplies (Tags) .....	1,443.21	
Balance June 30, 1925 .....	254.70	
	<hr/>	<hr/>
	1,713.76	1,713.76

**Manufacturing of State Flags****Receipts—**

Sale of Flags .....		34.70
---------------------	--	-------

**Expenditures—**

Over-draft brought Fd. ....	222.65	
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## SUPPLEMENTARY REPORTS

Flags .....	11.09	
Over-draft June 30, 1925 .....		199.04
	<u>233.74</u>	<u>233.74</u>

**Summer School****Receipts—**

Balance brought forward .....		8,403.04
Cash receipts .....	•	6,281.00

**Expenditures—**

Salaries—Instructors .....	5,215.00	
Labor .....	2,795.73	
Food Supplies .....	7,261.97	
Traveling Expenses .....	9.50	
Office Supplies .....	29.75	
Refunds .....	35.00	
Freight and Express .....	21.84	
Other Supplies .....	129.00	
Binders .....	96.02	
Over-draft June 30, 1925 .....		909.77
	<u>15,593.81</u>	<u>15,593.81</u>

**Athletic Association****Receipts—**

Balance brought fd. from prevous year .....		1,936.50
Cash receipts .....		35,753.89

**Expenditures—**

Salaries—Coach and Assistants .....	9,890.70	
Labor .....	314.46	
Officials and Umpires .....	1,139.65	
Guarantees and Expenses, etc. of teams .....	13,565.60	
Rain Insurance .....	750.76	
Supplies .....	5,780.26	
Medical Fees .....	309.35	
Freight and Express .....	8.49	
Tel., Teleg., and Postage .....	133.07	
Lyceum Entertainments .....	950.00	
Bleachers, Fencing, etc. .....	4,640.00	
Student Publications, postage, etc. .....	2,185.30	
Apportionment to Y. M. C. A. .....	2,139.73	
Refunds to students .....	78.00	
Asso. dues .....	32.50	
Over-draft June 30, 1925 .....		4,227.48
	<u>41,917.87</u>	<u>41,917.87</u>



**Textile Department****Receipts—**

Balance brough Fd. ....	2,750.97
Cash receipts .....	2,039.55

**Expenditures—**

Freight and Express .....	32.10	
Supplies .....	290.05	
Equipment .....	2,233.43	
Travel .....	97.72	
Repairs .....	55.75	
Telephone tolls .....	1.30	
Balance June 30, 1925 .....	2,080.17	
	<hr/>	
	4,790.52	4,790.52
	<hr/>	<hr/>

**Wood Shop****Receipts—**

Balance, brought forward .....	444.86
Cash receipts .....	1,058.79

**Expenditures—**

Labor .....	898.95	
Supplies .....	240.28	
Balance .....	364.42	
	<hr/>	
	1,503.65	1,503.65

**Cadet Exchange****Receipts—**

Sale of books, etc. ....	19,371.57
--------------------------	-----------

**Expenditures—**

Over-draft brought forward .....	25.61	
Salaries .....	499.92	
Labor .....	349.84	
Telephone Services .....	30.15	
Supplies .....	19,473.38	
Over-draft .....		1,007.33
	<hr/>	<hr/>
	20,378.90	20,378.90
	<hr/>	<hr/>

**Student Medals****Receipts—**

Balance brought Fd. ....	138.54
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**Expenditures—**

Norris Medal .....	50.26	
Balance June 30, 1925 .....	88.28	
	<hr/>	
	138.54	138.54



**Co-Operative Cotton Testing****Receipts—**

Cash Receipts .....		2,382.77
---------------------	--	----------

**Expenditures—**

Over-draft brought Fd. ....	592.08	
Labor .....	549.23	
Supplies .....	642.05	
Freight, Express, and Telephone .....	73.85	
Equipment .....	72.60	
Rent of machine and power .....	470.00	
Over-draft June 30, 1925 .....		17.04
	<u>2,399.81</u>	<u>2,399.81</u>

**Smith-Hughes Work****Receipts—**

Cash Receipts .....		26,020.96
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**Expenditures—**

Over-draft brought Fd. ....	12,873.31	
Salaries—Supervisors and Teachers .....	20,859.99	
Traveling Expenses .....	4,213.16	
Bulletins .....	776.25	
Office Supplies .....	474.74	
Miscellaneous Supplies .....	40.20	
Tel., Teleg., and Postage .....	107.23	
Labor .....	242.08	
Over-draft June 30, 1925 .....		13,566.00
	<u>39,586.96</u>	<u>39,586.96</u>

**Insurance Sinking Fund****Receipts—**

Balance brought Fd. ....		10,249.16
Cash receipts .....		5,335.51

**Expenditures—**

Insurance Premiums .....	15,556.72	
Labor and materials .....	76.23	
Over-draft June 30, 1925 .....		48.28
	<u>15,632.95</u>	<u>15,632.95</u>



## Smith-Lever Interest Fund

## Receipts—

Balance brought forward .....	4,902.14
Cash from interest on deposits .....	3,721.44

## Expenditures—

Sundry .....	640.00	
Freight and express .....	77.15	
Traveling expenses .....	642.84	
Subscriptions to news papers and pub. ....	1,274.04	
Miscellaneous supplies .....	360.50	
Office equipment .....	615.28	
Rent .....	87.50	
Honorarium .....	50.00	
Balance June 30, 1925 .....	4,876.27	
	<u>8,623.58</u>	<u>8,623.58</u>

## Rents

## Receipts—

Rent of residences, etc. ....	14,007.32
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## Expenditures—

Miscellaneous .....	176.15	
Misc. equipment .....	225.00	
Transfer to college account .....	13,606.17	
	<u>14,007.32</u>	<u>14,007.32</u>

## Receiving Account

## Receipts—

Interest, light and water sales, etc. ....	15,811.62
--	-----------

## Expenditures—

Over-draft brought forward .....	0.56	
Freight and express .....	87.55	
Equipment .....	522.27	
Premiums on Depository Bonds .....	1,400.00	
Misc. supplies .....	142.54	
Refunds to students (fees) .....	17.74	
Transfer to college account .....	13,348.38	
Transfer to new laundry account .....	292.58	

<u>15,811.62</u>	<u>15,811.62</u>
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## SUPPLEMENTARY REPORTS

**Agricultural Hall Fire Loss****Receipts—**

Insurance collected on building and contents

94,171.39

**Expenditures—**

None ..... 00

Balance June 30, 1925 ..... 94,171.39

94,171.39	94,171.39
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**Official Testing****Receipts—**

Cash receipts ..... 2,781.43

**Expenditures—**

Over-draft brought forward ..... 166.58

Pay and travel of inspectors ..... 2,918.15

Over-draft June 30, 1925 ..... 303.30

3,084.73	3,084.73
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**Laundry Building****Receipts—**

Transfer from receiving account ..... 292.58

**Expenditures—**

Over-draft brought forward ..... 292.58

Balance June 30, 1925 ..... 00

292.58	292.58
--------	--------

**Education of Disabled Souldiers****Receipts—**

Cash receipts ..... 4,234.88

**Expenditures—**

Over-draft brought forward ..... 2,424.59

Salaries ..... 1,833.32

Over-draft June 30, 1925 ..... 23.03

4,257.91	4,257.91
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**RECAPITULATION REVOLVING ACCOUNTS**

Balances brought forward (all sources) July 1, 1924 \$ 41,990.44

Receipts for year (al sources) 1925 256,355.87

Total to account for .....	298,346.31
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Overdraft brought forward (all sources) July 1, 1924	19,382.00
Expenditures for year (all sources) 1925	186,292.41
Balance June 30, 1925 .....	92,671.81
	<hr/>
Total as accounted for .....	\$298,346.31
	<hr/>

## PART TWO

### A Report on Federal and State Appropriations for Research, Extension and Experimental Work

#### REPORT ON PUBLIC SERVICE FUNDS

##### General Comments.

The funds referred to under this section are appropriations made by the Federal and State Governments, for statewide experimental work and public service, in the interests of agriculture. The money involved is distributed by the Treasurer of Clemson College, and partly by Winthrop College, various counties of the State and by the Comptroller General. The entire expenditure, however, is reported through the office of the Treasurer of Clemson College, and combined figures are, therefore, submitted herewith.

The Smith-Lever Fund, carrying Federal and State appropriations, is presented on page ..... A combined statement of the Adams and Hatch Funds and the receipts from the sale of farm products appears on page....., and a statement of the Agricultural Research Account (which represents a fund distributed by the Comptroller General of South Carolina, direct) is submitted on pages..... of this report.

#### STATEMENT OF SMITH-LEVER EXTENSION FUND (Year ended June 30, 1925)

##### Receipts—

Federal appropriation .....	\$156,014.48	
State appropriations (supplemented by		
by County appropriations (\$35,151.64)	146,014.49	302,028.97
Appropriations not handled by Clemson		
College direct:		
County appropriations .....	75,930.49	
Winthrop College appropriation .....	7,000.00	82,930.49
	<hr/>	<hr/>
Total all sources .....		\$384,959.46
		<hr/>

##### Expenditures—

Salaries—Director and asst. Dir. ....	6,750.00
Salaries—State supervising agents .....	25,545.52
Salaries—Specialists .....	57,195.88



## SUPPLEMENTARY REPORTS

Salaries—County agents .....	202,959.29	
Salaries—Stenographers and clerks .....	31,682.52	
Labor .....	669.04	
Supplies and materials .....	6,453.44	
Communication service .....	4,152.11	
Traveling expenses .....	38,142.73	
Freight and express .....	223.75	
Publications .....	6,621.11	
Heat, light and water .....	626.64	
Furniture and fixtures .....	2,961.38	
Office rent for agents .....	976.05	
Total expenditures .....		<u>\$384,959.46</u>

**STATEMENT OF HATCH, ADAMS AND FARM PRODUCTS ACCOUNTS**  
**(Year ended June 30, 1925)**

**Receipts—**

Balance on hand July 1, 1924 (sales) .....		\$ 2,083.33
Receipts from the treasurer of the U. S. as per appropriations for fiscal year ended June 30, 1925—		
Hatch fund .....	\$ 15,000.00	
Adams fund .....	15,000.00	
Sales on farm produce .....	39,368.71	69,368.71
		<u>71,452.04</u>

**Expenditures—**

Salaries .....	18,716.02
Labor .....	18,805.33
Publications .....	593.48
Stationery and office supplies .....	793.10
Freight and express .....	371.47
Heat, light, water and power .....	2,085.19
Scientific supplies .....	427.12
Sundry supplies .....	4,632.50
Fertilizers .....	3,970.99
Tel., teleg., and postage .....	514.74
Traveling expenses .....	683.12
Library .....	850.57
Furniture and fixtures .....	1,150.11
Scientific equipment .....	412.24
Live stock .....	1,840.55
Tools, machinery, etc. ....	2,596.93



Buildings and land .....	1,470.46	
Feeding Stuffs .....	9,732.91	
Total expenditures .....		69,646.83
Balance June 30, 1925 .....		1,805.21
		<u>\$ 71,452.04</u>

**STATEMENT OF AGRICULTURAL RESEARCH ACCOUNT**  
(Year ended June 30, 1925)

(Reported by college fiscal year, paid through Compt. General's office)

**Receipts—**

Appropriation July 1, 1924 to June 30, 1925	\$ 48,738.55
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**Expenditures—**

Salaries—Scientific staff .....	\$ 13,009.51	
Salary—Asst. to director .....	2,100.02	
Salaries—Chemists .....	1,660.83	
Salaries—Supts. of farm and stations .....	9,249.96	
Salary—Herdsman, dairy and ani. hus. ....	1, 703.30	
Salary—Foreman Hort. Division .....	660.00	28,383.62
Publications .....	621.61	
Office supplies .....	263.31	
Labor on experiments .....	5,488.72	
Labor—Animal Hus. Div. ....	571.87	
Labor—Dairy Div. ....	1,026.94	
Tools, implements and repairs .....	424.31	
Farm labor, etc. ....	268.21	
Seed and fertilizers .....	3,381.97	
Machinery and equipment .....	908.60	
Live stock .....	600.00	
Feed and veterinary supplies .....	3,077.44	
Motor vehicle supplies .....	150.21	
Miscellaneous supplies .....	31.17	
Office equipment .....	274.25	
Underdrainage and clearing .....	303.93	
Motor vehicle equipment .....	417.84	
Traveling expenses .....	2,544.55	20,354.93
Total expenditures .....		<u>48,738.55</u>



## SUPPLEMENTARY REPORTS

STATEMENT OF CO-OPERATIVE BOLL WEEVIL CONTROL ACCOUNT  
(Year ended June 30, 1925)

(Reported by college fiscal year, paid through Compt. General's office)

**Receipts—**

Appropriation July 1, 1924 to June 30, 1925 \$ 23,043.19

**Expenditures—**

Salary—Scientific staff .....	\$ 7,938.14	
Salary—Stenographer .....	1,100.00	
Salary—Temporary assistants .....	2,043.89	11,082.03
Telephone and telegraph .....	116.29	
Common labor .....	2,752.08	
Traveling expenses .....	1,530.12	
Repair parts to machine .....	935.54	
Office supplies .....	121.67	
Motor vehicle supplies .....	855.01	
Seeds and fertilizers .....	456.74	
Poison supplies .....	1,148.85	
Equipment, sewerage and miscellaneous ....	4,046.86	11,961.16
		<u>\$ 23,043.19</u>

## STATEMENT OF CROP PEST AND DISEASE ACCOUNT

(Year ended June 30, 1925)

(Reported by college fiscal year, paid through Compt. General's office)

**Receipts—**

Appropriation July 1, 1924 to June 30, 1925 \$ 10,759.63

**Expenditures—**

Salaries—Scientific staff .....	\$ 6,778.06	
Clerk and stenographer .....	951.00	
Labor—Poisoning work .....	112.14	
Traveling expenses .....	2,166.11	
Telegraph and telephone .....	125.57	
Office supplies .....	576.75	
Office equipment .....	50.00	
Total expenditures .....		<u>10,759.63</u>



**STATEMENT OF LIVE STOCK SANITARY WORK ACCOUNT**  
**(Year ended June 30, 1925)**

(Reported by college fiscal year, paid through Compt. General's office)

**Receipts—**

Appropriation July 1, 1924 to June 30, 1925 \$ 68,539.49

**Expenditures—**

Salaries—Veterinarians .....	\$ 24,667.91
Salaries—Assts. to veterinarians .....	5,905.00
Cattle inspectors .....	17,491.67
Deputy state veterinarians fees .....	99.26
Clerk .....	1,750.00
Wages, cattle inspector .....	1,312.00
Traveling expenses .....	10,332.32
Telegraph and telephone .....	215.27
Office supplies .....	164.65
Lab'y and disinfecting supplies .....	1,864.47
Other supplies .....	1,372.83
Rent .....	1,087.20
Payment—Slaughtered dis. live stock .....	2,210.55
Office equipment .....	39.00
Miscellaneous equipment .....	27.36

Total expenditures .....	<u>68,539.49</u>
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**PART THREE**

**A report on audit of the Cash Accounts, including all funds  
handled by the Treasurer of Clemson College.**

**GENERAL CASH REPORT**

(July 1, 1924 to close of bussiness on August 31, 1925)

**Consolidated Statement.**

A consolidated statement, showing all receipts and disbursements, handled by the Treasurer of Clemson College during the fiscal year ended June 30, 1925, is submitted on page ..... For verification of the cash accounts, I have also prepared the statement on page ....., for the period commencing July 1, 1925 and ending August 31, 1925, close of business.

**Cash as Verified.**

I have carefully counted the cash on hand (as shown by page ..... ) and have reconciled all bank accounts as of June 30, 1925 and August 31, 1925, respectively. The cash statements presented on pages ....., are given in support of the other statements attached hereto.

I beg to report that all funds of record have been properly accounted for.



**CONSOLIDATED STATEMENT ALL FUNDS**

(Fiscal year ended June 30th., 1925)

**Balances cash on hand July 1, 1924—**

Cash on hand July 1, 1924		
College account .....	\$124,079.55	
Cadet fund .....	18,432.80	
Revolving fund .....	22,608.35	
S. C. Experiment Station sales .....	2,083.33	
Students banking account .....	1,951.61	\$169,155.64

**Receipts for Fiscal Year—**

College account .....	377,083.06	
Cadet fund .....	269,243.38	
Student banking account .....	94,433.82	
Revolving funds .....	256,355.87	
Smith-Lever Extension Fund (Including \$111,082.13 County and \$7,000.00 Win- throp College Fund not paid by treasurer C. A. C. ....	384,959.46	
S. C. Expt. Stat. Hatch and Adams .....	69,368.71	1,451,444.30

State appropriations (Reported by College  
Fiscal year and paid through Compt. Gen-  
eral's office) .....

Agricultural research .....	48,738.55	
Co-Operative boll weevil control .....	23,043.19	
Crop pests and diseases .....	10,759.63	
Live stock sanitary work .....	68,539.49	151,080.86
<b>Total</b> .....		<b>1,771,680.80</b>

**Expenditures—**

College account .....	390,350.49	
Cadet fund .....	282,400.84	
Student banking account .....	95,716.92	
Revolving fund .....	186,292.41	
Smith-Lever Extension Fund (Including Counties and Winthrop College approp- riations not handled by Treas. C. A. C. ....	384,959.46	
S. C. Experiment Stat. Hatch and Adams ....	69,646.83	1,409,366.95

State appropriations (Reported by College  
Fiscal Year and paid through Compt.  
General's office)

Agricultural research .....	48,738.55
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Co-Operative boll weevil control .....	23,043.19	
Crop pests and diseases .....	10,759.63	
Live stock sanitary work .....	68,539.49	151,080.86
		<hr/>
Total expenditures .....		1,560,447.81
Balance on hand all sources June 30, 1925		211,232.99
		<hr/>
		\$1,771,680.80
		<hr/> <hr/>

**CONSOLIDATED STATEMENT**  
(July 1, 1924 to August 31, 1925—Close)

**Cash Balance June 30, 1925—**

College accounts .....		\$210,564.48
Smith-Lever account .....		00
		<hr/>

**Cash Receipts—**

College account .....	95,500.96	
Smith-Lever accounts .....	4,958.00	100,458.96
	<hr/>	<hr/>

Total to account for .....		311,023.44
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**Deduct—****Disbursements;**

College account .....	91,817.23	
Smith-Lever accounts .....	24,746.83	116,564.06
	<hr/>	<hr/>

Balance to account for .....		\$194,459.38
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**Cash Balances: (August 31, 1925)—**

College funds .....		217,167.42
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**Less: Over-drafts;**

Smith-Lever fund .....	24,746.83	
Cadet deposit account .....	2,919.21	27,666.04
	<hr/>	<hr/>

		\$189,501.38
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**Deposit after Balance—**

Fort Hill Bank .....		4,958.00
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Net cash .....		\$194,459.38
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**GENERAL CASH STATEMENT**  
(June 30th., 1925)

**Balances as per ledger—**

General college fund .....		\$110,812.12
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## SUPPLEMENTARY REPORTS

Cadet fund .....	5,275.34
Re-Investment fund .....	92,671.81
South Carolina Experiment Station .....	1,805.21
Total (Cash Book baance) .....	<u>\$210,564.48</u>

## Accounted for as follows—

National Bank of Sumter, Sumter, S. C. ....	25,000.00	
Farmers Bank, Abbeville, S. C. ....	25,000.00	
Union Savings Bank, Bennettsville, S. C. ...	25,000.00	
Bank of Greenwood, Greenwood, S. C. ....	25,000.00	
Columbia National Bank, Columbia, S. C. ....	10,000.00	
Carolina National Bank, Anderson, S. C. ....	5,000.00	
Bank of Anderson, Anderson, S. C. ....	\$ 10,000.00	
Norwood National Bank, Greenville .....	5,000.00	
National Bank of Newberry, Newberry, S. C. ....	30,000.00	
American Bank and Trust Co., Columbia .....	31,171.39	191,171.39
Fort Hill Bank .....	\$43,000.85	
Less: Checks outstanding .....	23,871.40	19,129.45
		<u>\$210,300.84</u>

## Banks in Liquidation—

Farmers & Merchants Bank, Anderson .....	8,783.55	
Bank of Pendleton (Int. Acct.) .....	5,000.00	13,783.55
		<u>\$224,084.39</u>

## Deduct—

## Over-draft;

Bank of Pendleton .....	13,519.91
Net cash June 30, 1925 .....	<u>\$210,564.48</u>

Cash in Banks — .....	\$210,564.48
Cash in Office .....	668.51
Total .....	<u>\$211,232.99</u>

**GENERAL CASH STATEMENT**  
(Close of business August 31, 1925)

## Balances as per ledgers—

General college fund .....	\$134,587.81
Cadet fund (Over-draft 18,785.79) .....	
Re-Investment fund .....	92,936.63



South Carolina Experiment Station .....	8,428.77	
	<u>\$235,953.21</u>	
Less: Cadet fund over-draft .....	18,785.79	
	<u>\$217,167.42</u>	

**Accounted for as follows—**

National Bank of Sumter .....	20,000.00	
Union Savings Bank, Bennettsville .....	20,000.00	
Farmers Bank, Abbeville .....	25,000.00	
Bank of Greenwood .....	15,000.00	
Carolina National Bank, Anderson .....	5,000.00	
Bank of Anderson .....	10,000.00	
Norwood National Bank, Greenville .....	5,000.00	
National Bank of Newberry .....	25,000.00	
American Bank & Trust Company .....	31,171.39	\$156,171.39
	<u>69,654.41</u>	
Fort Hill Bank .....	69,654.41	
Less: Checks outstanding .....	8,043.67	61,610.74
	<u>\$217,782.13</u>	

**Banks in Liquidation—**

Farmers & Merchants Bank, Anderson .....	7,905.20	
Bank of Pendleton (Int. Account) .....	5,000.00	12,905.20
	<u>\$230,687.33</u>	

**Deduct—****Over-draft:**

Bank of Pendleton .....	13,519.91	
	<u>\$217,167.42</u>	

**Note—**Outstanding checks are not shown in detail, because of the number of items—the records have been carefully audited in this respect, however, and all bank accounts reconciled with the books of account.

L. A. S.

**CASH STATEMENT—SMITH-LEVER FUND****Balance as per ledger—**

All funds expended .....	00	
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**Funds accounted for as follows—**

Norwood National Bank, Greenville .....	5,000.00	
Central National Bank, Spartanburg .....	5,000.00	



		10,000.00
<b>Deduct—</b>		
<b>Over-draft:</b>		
Fort Hill Bank .....	2,431.94	
Bank of Pendleton .....	372.64	
Checks outstanding .....	7,195.42	10,000.00
	<hr/>	<hr/>
Net cash .....		00
		<hr/> <hr/>

(Close of business August 31, 1925)

**Balance as per ledger—****Over-draft:**

Federal Smith-Lever fund .....	11,013.30
State Smith-Lever fund .....	10,963.53
Federal supplementary fund .....	2,770.00
	<hr/>
Total over-draft (Cash Book) .....	\$ 24,746.83
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**Accounted for as follows—**

Norwood National Bank, Greenville .....	5,000.00
Central Natinal Bank, Spartanburg .....	5,000.00
	<hr/>
	10,000.00

<b>Over-draft:</b> Fort Hill Bank .....	32,570.08
Bank of Pendleton .....	372.64
Checks outstanding (As audited) .....	1,804.11
	<hr/>
	34,746.83
<b>Less:</b> Deposits as above .....	10,000.00
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Net deficit .....	24,746.83
	<hr/> <hr/>

**Note—** The account shows an over-draft as of August 31, 1925, for the reason that funds from the Federal Government were not received until after this date.

**STATEMENT OF CASH IN OFFICE**

(Count of cash, close of business, August 15, 1925)

Balance as per Cash Book .....	\$ 8,454.79
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**Cash as counted—****National currency and Legal Tender:**

Ten-dollar bills .....	20.00	
Five-dollar bills .....	660.00	
One-dollar bills .....	373.00	1,053.00



**Silver and Minor coin:**

Halves .....	115.00	
Quarters .....	185.50	
Dimes .....	34.20	
Nickels .....	30.30	
Pennies .....	12.31	377.31

<b>Gold Coin</b> .....		105.00
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<b>Actual cash as counted</b> .....		1,535.31
Post office money orders (as audited) .....		47.18
Checks for deposit .....		1,482.39

<b>Total cash and checks for deposit</b> .....		3,064.88
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**Other items counted as cash—**

Sundry pay-roll advances .....	489.40	
Postage and sundry items .....	72.04	
Other cash items .....	414.52	975.96

		4,040.84
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**\*Fort Hill Bank, Clemson College—**

Miscellaneous account (clearing account for unfinished business—including in Cash Balance .....		4,413.95
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<b>Total cash and items counted as cash</b> .....		8,454.79
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**\*Note—**The balance shown under the head of Fort Hill Bank, is a part of the office cash. This amount is carried for convenience in handling matters prior to final entry on the books of account.

L. A. S.

**Note—**The acsh was counted on August 15, 1925, but general accounts and bank balances are verified to August 31, 1925, as this is a more suitable date for closing.

L. A. S.